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1888.

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1888.

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"*Resolved*, That this Association shall not be considered as endorsing views of authors of papers published in connection with the Transactions, unless definitely so endorsed in the proceedings of the Association.

"*Resolved*, That the above resolution appear annually upon the title-page of our published proceedings."—*Transactions*, 1873.

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NOTE.

OFFICE OF THE SECRETARY

MEDICAL ASSOCIATION OF GEORGIA,
Macon, Ga., Feb. 1st, 1888.

The Secretary begs, in justice to himself, to state that the delay in issuing this volume of Transactions, does not lie at his door. The materials, consisting of minutes, papers, etc., from the last session of the Association, was not received from former Secretary until late in July, and very few of the papers presented at Rome were included in this shipment.

It required a vast amount of writing and rewritting to stimulate the various authors to send in their papers, and some of them have *never* been received. A good part of the material for the book was gotten together, and placed in the hands of the publishers about September 1st; and here to a large extent the delay rests. But in extenuation, I would say in their behalf, that some of the authors insisted on reading the proof of their papers, and would keep proof for two or three weeks at a time.

In the necessary changes, incident to changing of the office of Secretary, and the new plan of arranging the Committee on Sections, etc., some inaccuracies may have occured in the book, but I beg indulgence, and most earnestly ask for the active support and co-operation of the Association in the future.

K. P. MOORE, Secretary.

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MINUTES

OF THE

MEDICAL ASSOCIATION

OF GEORGIA.

Thirty-Ninth Annual Session.

FIRST DAY—MORNING SESSION.

ROME, GA., April 18th, 1888.

The Medical Association of Georgia convened at 12 o'clock in the City Hall, and was called to order by the Vice-President, Dr. G. W. Mulligan, of Washington, Georgia.

Dr. Robert Battey in behalf of the Committee of Arrangements, made the following address of welcome:

Mr. President and Gentlemen of the Medical Association of Georgia:

The grateful duty has been assigned me of welcoming you to the hearts and houses of this goodly city of modern Rome. Our people are well apprised of the fact that it is no ordinary body of men which assembles to-day to deliberate upon questions which concern the health and the lives of the community at large, as well as of those of our own households who our hearts cling to, and cherish with undying devotion. We are well aware that your muster roll contains many names of men who rank high in the profession—names well known and deservedly honored throughout the length and breadth of our land.

Here are men, too, whose unostentatious deeds of charity to the deserving poor, dispensed day by day, month after month, year after year, throughout a life time of useful and self sacrificing labor, eminently entitles them to the homage of the communities in which they live.

Here are the gray-haired veterans tottering under the weight of accumulated years of toil and hardship beneath the burning sun of the summer's day and through the chilly blasts of the winter's midnight. Here are the strong men, full of energy and vigor, battling manfully in their might with the pestilence that wasteth at noonday.

Here, too, are the youth, freshly fledged from the college incubators, full of joyous hopes, of golden dreams and of conscious power.

To one and all, the enfeebled veteran, the mailed warrior and the youthful cadet, we gladly open our doors and bid you cordial welcome. Amid the beautiful scenery which surround you upon every hand, you may roam at your will, and when footsore and weary you have only to step upon our dummy cars and ride to your heart's content.

Whilst extending to you, in the name of the good people of Rome, the open palm of manly greeting, you will not fail to observe the weeds of mourning drooping from our professional elbow. A newly-made grave tells the tale of the somber thread which mingles with the brighter woof in our welcome.

A young brother, greatly beloved by our local profession for his *esprit de corps*, and by our whole community, for his useful and untiring labors, for his manly qualities, for his generous and loving heart, has suddenly fallen by the wayside and gone to his abundant reward. He leaves behind him no enemies, but a host of weeping friends.

The doctor was heartily applauded at the conclusion of his speech.

The Mayor, Hon. W. F. Ayer, was introduced and stated that he had delegated the pleasant duty of welcoming the Doctors in behalf of the city, to Col. John T. Graves of the *Tribune*.

Col. Graves said :

Mr. President and Gentlemen:

I am perfectly willing to stand for the mayor upon any occasion, but I am not willing to stand for him behind a desk that I can barely see over. In this open space which will better display my magnificent proportions, I stand in the mayor's place to say that which the mayor, if he were not as modest as he is meritorious, might say much better, but not more heartily, for himself. I am suddenly subpœnaed, as it were, by the civil authorities of this prosperous city, to give evidence in the matter of their good will toward you. It is a duty which comes to me acceptably and easily, and it gives me pleasure to say to you for the mayor, and for the city, that you are, not only professionally, but personally, right welcome to Rome.

After the warm words of welcome from our great and honored friend whom we esteem no less for his noble usefulness as a citizen than we appreciate him for his remarkable achievements as a physician, it is not necessary that I should emphasize the professional welcome which in behalf of himself and colleagues, he has spoken from his heart to yours.

I speak for the outsiders—your victims—who stand in awe of your professional dignity, intimidated by your lancets, terrorized by your blisters, and inflated by your tonics, are rejoiced to have corralled you in the prison of their hospitality, where all these deadly weapons must be laid down, and the malice aforethought with which they have been used. With your licenses geographically expired, you are no longer dangerous, and stripped of your weapons, we are willing to welcome you with hospital hands to hospital homes, for we are persuaded that, outside of your profession, you are the finest body of men ever assembled in this or any other State.

It comes particularly easy for me to talk to you doctors. I am used to it. In the language of Mr. Milton Nobles, of dramatic fame, "If there is one thing I know more about than another, it is doctors." I have been upon terms of personal intimacy with the profession during my entire life. In the rather hazy recollections of my first struggle for freedom and independence, the figure of a doctor has a conspicuous place, and the force of early associations is so strong within me that I have never been out of sight of a doctor since. Upon the principle of prevention I made it a rule to call one in for every sore finger in my family until, in the course of nature, and in the State of Florida, I developed a bad liver, that fountain seat of every ill, over whose creation physicians weep and over whose existence patients mourn. With this addition, like the poor, I am with you always.

I do not know any better way to commend myself to your good graces, gentlemen, than to confess that I am due in unpaid bills to some five hundred doctors scattered hopelessly in seven States, an amount of money for medical attention that would shame the troublesome surplus in the National Treasury, and I cannot repress the apprehension that one surplus is as little likely to be reduced as the other. When this speech is over and the convention has adjourned I shall feel free to ask a separate prescription for my liver from each of the sixty-five doctors here present, and I faithfully promise to shake and take until each prescription has had a fair trial—before a jury of its peers.

I assure you again gentlemen, in behalf of the mayor, in behalf of the city, and in behalf of the organ afore mentioned, that you are very welcome to Rome. I do not know in all this broad land a better place for a doctor's holiday. I do not know any place, where, if you were to stay the year round, you would find a heartier welcome—and less to do. Our doctors in Rome are here for ornament only. We never think of troubling them to practice their professions. They are without exception men of large fortunes and unlimited leisure. Those who have not accumulated money by practicing upon the infirmities of the stranger within our gates, have acquired fortune by quadrilateral investments in real estate and agriculture. The greatest of our specialists has to go outside of the city and county to import patients to work upon, and the largest practitioner in North Georgia draws a revenue from superb landed and farming interests, wherewith he drives around in a $5,000 turnout, to thump the soundest of livers, and to feel the steadiest pulses that ever beat in unison with the hope and progress of the steadiest city in the South.

There is something in the constitution and by-laws of these North Georgia people that is not profitable to a profession, whose emblem is not Patience on a monument, but a long line of monuments upon patients. In this city of 12,000 people, there has

never originated a single case of consumption or catarrh! This eloquent fact puts a quietus upon all your stethoscopes. On the high banks of these clear and swiftly-flowing rivers, there is no room for fever or malaria, and the rattle of your pill-boxes becomes a hollow mockery here. The air in which we live has been proven by experiment to be so balmy and full of kindliness to surgery, that it is almost a temptation to ask you to cut off some gentleman's leg—a member of the convention preferred—just to see how quickly and kindly it will heal.

And so, gentlemen, there is nothing for you to do here but to enjoy yourselves. I recall that fine old chestnut of Marcus Tullius Cicero, "*Si bene vales, valeo*"—(If you are well, I am well). Everybody is well here, and everybody is glad to see you. Make yourselves at home. The city belongs to you, and everybody echoes from the heart the sentiment—"God bless the doctors!"

During the delivery of Mr. Graves' address, frequent hand clappings gave emphasis to the pleasure with which it was heard, and when he finished there was a perfect storm of applause.

Dr. J. S. Todd, of Atlanta, responded to the address of welcome, as follows:

Mr. President, Ladies and Gentlemen:

Although I have been suddenly called on to make answer to these warm and generous words of welcome, to which we have listened with so much pleasure, I shall depart from the time honored custom, and make neither excuse nor apology for lack of glowing periods. In behalf of the delegates to this meeting I return hearty thanks for the welcome which has not only been spoken, but which has been extended in such generous shape. For my brethren, I pledge that good behavior shall characterize our stay in beautiful Rome, and that we brought no contagious disease with us, even though such importation would prove a help to our local brethren, for they must be in a distressed state, judging from the picture painted by Mr. Graves. Rome is the most promising city in Georgia. [Applause.] We are glad to be here, and especially grateful are we for the presence of Rome's fair women. The ladies of Rome are always gracious, always an inspiration, always a beautiful blessing. Well do I recall the time, years agone, when, as a soldier under the gallant Forrest, I rode with my companions through the streets of this city, and the ladies of Rome gave us cheering salutation from windows and balconies. They were helpful to us then, they are helpful to us now. This city is the home of a man whose fame has filled two continents, and whose spotless character is an example to us all, Dr. Robert Battey. And then there are the Holmes,' a tribe of doctors, known far and near, and others whose names and fame have gone abroad. But I must stop. What more can I say than this: For your welcome, for your warm hospitality, we tender you our thanks.

Dr. Battey, at the conclusion of Dr. Todd's speech, asked the audience to rise, while Rev. Dr. R. B. Headden, pastor of the Baptist church, led in prayer.

The Committee of Arrangements reported the following

PROGRAMME.

WEDNESDAY MORNING.

Open at City Hall, 12 o'clock, M.

Prayer by Rev. Dr. R. B. Headden. Address of Welcome by Dr. Battey. Address of Welcome by the mayor, Hon. W. F. Ayer. Response in behalf of the Association, by Dr. Eugene Foster, of Augusta. Address of President, Dr. A. G. Whitehead, of Waynesboro.

AFTERNOON—Meet at City Hall, 3 o'clock.

EVENING—Concert at Shorter College, 8 o'clock.

THURSDAY MORNING.

Meet at City Hall, 9 o'clock, A. M. Adjourned 12:30 o'clock for barbecue at Lakeview Park.

AFTERNOON—Excursion on Coosa at 4 'o'clock.

EVENING—Reception at Dr. Battey's, on First Avenue, 8 to 11 o'clock. Reception at Dr. J. B. S. Holmes', on Second Avenue, 8 to 11 o'clock.

FRIDAY MORNING.

Meet at City Hall, 9 o'clock, A. M.

AFTERNOON—Meet at City Hall, 3 o'clock.

EVENING—Concert of Rome Female College, at Nevin Opera House, 8 o'clock.

Rev. L. R. Gwaltney, President of Shorter College, was introduced and extended an invitation to attend a concert at the College to-night.

Accepted.

The incoming President, Dr. A. G. Whitehead, was introduced and delivered the annual address. [See Appendix.]

Association adjourned to meet at 3 o'clock.

FIRST DAY—EVENING SESSION.

The Association was called to order promptly at 3 o'clock.

The Secretary read letters and telegrams from absent members, expressing regrets at not being present, also invitations from Dr. and Mrs. Battey to a reception at their residence on First Avenue, on Thursday evening from 8 to 11 o'clock, and also from Dr. and Mrs. J. B. S. Holmes, to a reception for the same evening and hours, at their residence on Second Avenue. Also, an invitation from Dr. Battey to visit his private infirmary on Friday, from 12 to 1 o'clock.

The Committee of Arrangements reported the following gentlemen present, duly registered and entitled to participate in the deliberations of the Association:

[Names of new members were sebsequently added.]

F. J. Arbeely, Atlanta; J. R. Humphries, Acworth; C. H. Colding, Savannah; M. P. Deadwyler, Elberton; I. H. Goss, Fort Lamar; P. R. Cortelyou, Marietta; R. Battey, Rome; J. M. Boring, Atlanta; F. W. McRae, Atlanta; D. H. Howell, Atlanta; E. H. Richardson, Cedartown; J. B. S. Holmes, Rome; Samuel C. Benedict, Athens; J. M. McDowell, Barnesville; Robt. B. Barron, Clinton; J. W. James, Rome; G. W. Mulligan, Washington; A. G. North, McDonough; W. Z. Holliday, Harlem; J. S. Todd, Atlanta; Virgil O. Hardon, Atlanta; F. R. Calhoun, Euharlee; Hunter P. Cooper, Atlanta; W. H. Doughty, Jr., Augusta; B. R. Doster, Blakely; Arch. Avary, Atlanta; T. M. Holmes, Rome; G. W. Holmes, Rome; R. H. Taylor, Griffin; R. L. Tye, McDonough; E. R. Anthony, Griffin; J. A. Dunwody, Brunswick; S. W. Johnson, Graham; A. G. Whitehead, Waynesboro; A. W. Calhoun, Atlanta; W. D. Hoyt, Rome; Thos. Harry Huzza, Rome; E. C. Goodrich, Augusta; H. P. Quillian, Arp; H. D. Cunyers, Bartow county; J. B. Medlock, Austell; A. W. Wright, Cave

Spring; J. A. Butts, Brunswick; W. H. Poole, Douglasville; W. F. Westmoreland, Jr., Atlanta; N. O. Harris, Atlanta; H. F. Scott, Atlanta; L G. Hardman, Harmony Grove; W. O. Dobbins, Fort Gaines; John J. Hill, Washington; W. B. Wells, Chattanooga, Tenn.; A B. Ashworth, Atlanta; J. W. Clements, Subligna; H. H. Battey, Rome; G. R. West, Rome; Jas. B. Baird, Atlanta; W. S. Kendrick, Atlanta; J. S. Beazley, Stilesboro; G. W. H. Noble, Atlanta; K. P. Moore, Macon; C. F. Griffin, Cassville; Lindsay Johnson, Cartersville; M. J. Dudley, Sonora; W. X. Bleakney, Eden; C. C Hart, Cross Keys; Chas. A Brooks, Americus; N. C. Alston, Jr., Richland; J. G. Graves, Cartersville; J. T. Johnson, Atlanta; W. F. Westmoreland, Atlanta.

Dr. Robert Battey being the only member of the Board of Censors present, the President appointed Drs J. S. Todd, Atlanta; B. R. Dostor, Blakely; W. H. Doughty, Jr., Augusta; J. B. S. Holmes, Rome, as temporary members of the Board.

Dr. F. W. McRae, stated that Dr. H. V. M. Miller, of the Committee on Expert Testimony, desired him to say that any extension of present legislation seemed impossible at this time.

Dr. McRae also reported in behalf of the Committee on Medical Legislation—stating that the Anatomical Board had been organized according to the requirements of the law passed at the last session of the Legislature, and was working satisfactorily, and that the Committee thought any further beneficial legislation could not be obtained.

On motion, both Committees were discharged from further service.

The Committee on Prize Essays made the following report:

To the Medical Association of Georgia:

GENTLEMEN—The Committee on Prize Essay Fund beg leave to report, that the Fund on hand as per last report was ninety-one 66-100 dollars ($91.66-100), which with accu-

mulated interest at 4 per cent., now amounts to ninety-five 39-100 dollars ($95.39-100), which sum remains on deposit with the Oglethorpe Saving and Trust Company, 120 Bryan Street, Savannah, Georgia, to the credit of R. J. Nunn, Chairman Prize Essay Fund, Medical Association of Georgia.

All of which is respectfully submitted,

R. J. NUNN, *Chairman Committee.*

Accepted.

The Board of Censors reported favorably upon the application for membership of Drs. L. P. Stephens, J. A. Dunwody, D. W. Scott, S. W. Johnson, W. O. Dobbins, J. M. Crawford, H. P. Quillian, T. E. Drewry, L. J. Belt, H. B. McMaster, H. D. Cunyers, J. B. Medlock.

Dr. Robert Battey introduced Dr. J. D. Galt, of Norfolk, Virginia, as a delegate from the Medical Society of Virginia.

Voluntary papers, as follows, were read by title:

By Dr. J. S. Todd, Atlanta: Subject—"Is the Germ Theory of Disease Rational?"

By Dr. J. B. Medlock, Austell: "Austell, Georgia, as a Health Resort."

By Dr. Virgil O. Hardon, Atlanta: "Superinvolution of the Uterus following Trachelorrhaphy."

By Dr. R. C. Wood, Atlanta: "What is the matter with me and what shall I do."

Reports from sections were received as follows:

First District. Gynecology—"Ramie as a Gynecological dressing," by R. J. Nunn, M. D., Savannah.

Fifth District. Surgery—"Laparotomy with attachment of ileum to incision in a case of Volvulus," by J. McF. Gaston, M. D., Atlanta. "Plaster of Paris Splints in the treatment of Fractures," and "Antiseptic Surgery," by W. F. Westmoreland, Jr., M. D., Atlanta. "Treatment of Hemorrhoids" by Hunter P. Cooper, M. D., Atlanta. "Report of a case of Scirrhus Cancer of descending colon, at Sigmoid flexure, followed by rupture of transverse colon and death," by W. S.

Elkin, M. D., Atlanta. "Report of Surgical Cases," by R. H. Taylor, M. D., Griffin.

Fifth District. Gynecology—"Treatment of the Placenta after Abortion," by W. H. Poole, M. D., Douglasville.

Seventh District. Practice—"On the use of Peroxide of Hydrogen, in diseases of the Throat and Nose," and "Antifebrin as an Antipyretic," by P. R. Cortleyou, M. D., Marietta.

Eighth District. Surgery—Two cases of "Trephining for Depressed Bone," one case of "Double Amputation for Caries of Tarsus," and one case of "Extensive Division of Perineum for Anal Fistulae Tunder Cocaine Anæsthesia," by T. C. Benedict, M. D., Athens.

Tenth District. Surgery—"A case of Fractured Skull with much loss of Brain Substance; Recovery with no Unfavorable Symptoms," by W Z. Holliday, M. D., Harlem.

The President appointed Drs. A. W. Calhoun, G. W. Mulligan, and E H. Richardson, as an Auditing Committee.

Treasurer's Report received, read and referred to Auditing Committee.

AUGUSTA, GA., April 17th, 1888.

To the Medical Association of Georgia:

GENTLEMEN—In submitting my report I desire to call the attention of the Association to our healthy financial condition. The volume of transactions was paid for as soon as published. We owe nothing, and we have a neat balance in the treasury, notwithstanding the fact that I was compelled to drop from the Roll during the year, more than fifty members for the non-payment of dues, many of whom I had carried far beyond the Constitutional limit. I have collected over $200.00 back dues since our last meeting.

I would like to return my thanks to the members for their generally prompt attention to my notices, and ask in the future their kind assistance in the discharge of my duties.

Below find financial statement:

1887.	DR.	
April 22d, Balance in Treasury		$111 89
Initiation Fees		170 00
Dues collected		702 00—$ 983 89
	CR.	
Amount paid out as per vouchers herewith		$496 56
Balance on hand		487 33—$ 983 89

Respectfully submitted,

E. C. GOODRICH, *Treasurer.*

On motion, voluntary papers were called up and the following read:

"Is the Germ Theory of Disease Rational?" by J. S. Todd, M. D., Atlanta. "Superinvolution of the Uterus following Trachelorrhaphy," by Virgil O. Hardon, M. D., Atlanta.

The reports of the following committees were deferred until the Thursday morning session:

Committee on reorganizing the Association.

Committee on State Medical Directory.

Committee on Necrology.

The last was made a special order for 10:30 o'clock.

The Secretary's report was read and referred to the Auditing Committee.

REPORT OF SECRETARY.

To the Medical Association of Georgia:

My being Secretary is due to the courtesy of our President, my term expiring with this meeting. I desire, in retiring, to tender my thanks for the courtesies extended me, and to submit this report:

DR.

To paid J. P. Harrison & Co	$ 13 00	
To paid J. P. Harrison & Co	396 76	
To paid Postage on Transactions, 1886	5 70	
To paid Postage on Transactions, 1887	25 50	
To paid Postage on Letters, Circulars, Messages, etc.	14 00	
To paid M. Slaughter, Assistant Commissioner	4 50	$ 459 46

CR.

By dues, W. L. Kendrick	$ 3 00	
By dues, L. H. Jones	3 00	
Sold Transactions	2 00	
Received from Treasurer	396 76	$ 404 76
		$ 54 70

Respectfully, A. B. ASHWORTH, *Secretary.*

REPORT OF COMMITTEE ON PUBLICATION.

To the Medical Association of Georgia:

On the death of the late lamented Secretary and Chairman, of this Committee, early last Fall, I consented to take up the work of completing the Transactions, which were about half finished.

It was found that three hundred copies had been contracted for. Upon consultation with the Treasurer, and before the roll had been revised, it was thought best, as it was found possible, to contract for twenty-five additional copies.

They were hurried through and issued early in December, and cost as follows: The first three hundred copies, 131½ cents per page, the additional twenty-five copies, 114⅜ cents per page, or a total for the handsome book of two hundred and sixty-six pages, of $378.46. This is much less than the cost heretofore, and less than the competitors of J. P. Harrison & Co., Publishers.

Respectfully. A. B. ASHWORTH, *Chairman.*

The Association adjourned to meet at 9:30 o'clock Thursday.

SECOND DAY—MORNING SESSION.

The Association was called to order promptly at 9:30 o'clock

The Secretary read letters and telegrams from absent members, expressing regrets at not being present.

Dr. Robert Battey, of the Committee of Arrangements, offered the following resolution:

That Dr. G. H. Robe, of Baltimore; Dr. J. H. Branham, of Baltimore; Dr. A. P. Richardson, of Forney, Alabama, delegates from their respective State Societies, be invited to seats on the floor, and to participate in the discussions of the body.

Adopted.

Prof. S. C. Caldwell, President of the Rome Female College, invited the Association to visit the College, and to attend a concert at the Opera House on Friday evening.

Accepted.

Dr. T. M. Holmes, of Rome, read a paper on "Multiple Neuritis," and exhibited the patient.

The Auditing Committee submitted the following report, which was adopted:

The Auditing Committee beg to report that they have examined the books and papers of the Treasurer, and found them correct, and approve the same.

In reference to the President's recommendation as to the salary of the Secretary and Treasurer, we would make the following suggestion:

That there be no salary attached to either of the offices, but inasmuch as there is a surplus in the Treasury, we would suggest that $100.00 be given to Dr. Goodrich, Treasurer, and $150.00 be appropriated to the office of Secretary, $100.00 of which is to be given to the widow of Dr. Gray, and $50.00 to the present Secretary, Dr. Ashworth.

This action of the Auditing Committee is not to be considered as a precedent for the action of the Association at future meetings, but they would recommend that each meeting decide for itself, whether the Association is in condition to appropriate any money to these offices.

Respectfully submitted,

A. W. CALHOUN,
G. W. MULLIGAN,
E. H. RICHARDSON, *Committee.*

The Board of Censors reported favorably on the application for membership, of Drs. J. A. Butts, C. C. Hart, M. J. Dudley, C. F. Griffin, Lindsay Johnson, H. Burford, W. X. Bleakney, G. R. West.

The report of the Committee on Necrology was received and referred to Committee on Publications.

By Dr. J. S. Todd:

Resolved, That the families of Drs. J. A. Gray and V. H. Taliferro, be requested to furnish electrotype cuts of these gentlemen, to be placed in the volume of Transactions, accompanying the notices of their death.

Amendment by Dr. K. P. Moore, to include Dr. D. W. Hammond.

Adopted.

On motion, Dr. Virgil O. Hardon, of Atlanta, was appointed to prepare a suitable memorial of the late Dr. Henry Wile, Atlanta.

The President announced the following Nominating Committee:

Early, B. R. Dostor; Richmond, W. H. Doughty; Floyd, G. W. Holmes; Clark, S. C. Benedict; Jackson, L. G. Hardman; Glynn, J. A. Dunwody; Elbert, M. P. Deadwyler; Banks, H. P. Quillian; Madison, I. H. Goss; Cobb, J. R. Humphries; Chatham, C. H. Colding; Columbia, W. Z. Holliday; Henry, R. L. Tye; Fulton, A. W. Calhoun, alternate, H. P. Cooper; Spalding, E. R. Anthony; Appling, S. W. Johnson; DeKalb, R. C. Word; Jones, R. B. Barrow; Polk, E. H Richardson; Wilkes, G. W. Mulligan; Clay, W. O. Dobbins; Bartow, F. R. Calhoun; Washington, I. R.

Henderson ; Burke, H. B. McMaster ; Douglas, W. H. Poole ; Pike, J. M. McDowell ; Bibb, K. P. Moore.

The following voluntary papers were read :

By A. W. Calhoun, M. D., Atlanta, "Nervous Troubles dependent upon a want of Equilibrium of the Ocular Muscles."

By J. B. Medlock, M. D., Austell, "Austell, Georgia, as a Health Resort."

By W. D. Hoyt, M. D., Rome, "Case of Resection of Elbow Joint, with Reconstruction of Joint," and exhibited the patient.

By Dr. G. H. Rhoe, of Baltimore, a fraternal delegate from the Maryland Medical Society, read a paper on "Electrolysis." He also exhibited the various kinds of electrodes used in the different applications of the method.

Dr. Willis F. Westmoreland, Sr., of Atlanta, made an interesting and valuable talk on, "Fissure of the Anus, so-called." It was greeted with applause.

On motion of Dr. J. S. Todd, the Association elected Dr. J. Thad Johnson, an ex-president of this body, an honorary member, and invited him to a seat on the rostrum.

On motion, the Association adjourned to 9 o'clock, Friday ; in meantime to attend a barbecue at Lakeside Park, and a boat ride on the Coosa river.

THIRD DAY—MORNING SESSION.

The Association was called to order promptly a 9 o'clock.

The Secretary read letters and telegrams from various members, expressing regrets at being absent.

Letters from the following, inclosing papers to be read, were presented :

Dr. T. S. Dekle, of Thomasville : "Antipyrine in Gynecological Practice."

Dr. R. O. Cotter, of Macon: "Report of some cases of Hypertrophic Rhinitis, with results for operation of same."

Dr. C. H. Richardson, of Montezuma: "Typhoid Fever in which the usual Eruption and Diarrhœa not present, but marked Tympanitis and Gaseous distension in all," which on motion were referred to the Publication Committee.

Dr. A. C. Davidson, of Sharon, presented the following papers by title: "Four cases of Puerperal Eclampsia, with Treatment," "Two cases Salivary Calculus, one in Wharton's, the other in Steno's Duct," "A case of Puerperal Tetanus after Craniotomy, death on eighth day," "On Rheumatism with cases illustrating the value of Oil of Gaultheria in acute Inflammatory cases."

The Board of Censors reported favorably on the application for membership of Drs. C. A. Brooks, N. C. Alston, Jr., L, M. Crichton, D. H. Ramsaur.

Dr. W. A. Love, Chairman of the Committee on State Medical Directory, made this report:

I am Chairman of the Standing Committee on the Medical Directory for the State. I have done much work on the same, and will ask that the Committee *be continued*. I have been laboring for the Organization of County Medical Societies, with some degree of success, though the work progresses slowly, inasmuch as the profession seem tardy in their efforts to bring about union and concert of action in many sections of the State, whilst in others, they are taking hold of the work with a fervency and zeal that promises well.

I shall continue this work with the hope of making a more favorable report at our next Annual meeting of the Association.

I am, very truly yours,

WM. ABRAM LOVE.

Report adopted and Committee continued.

New business was declared in order.

Dr. S. C. Benedict, of Athens, offered a resolution providing for a committee on programme. It was stated that the object of the motion was to facilitate the work of the Asssciation, and to economize its time. A full, free and animated discus-

sion followed, in which the merits and demerits of the resolution were thoroughly ventilated. Several amendments were offered, and finally accepted. After an exciting debate, the resolutions as amended, were adopted without a dissenting voice :

Be it Resolved, First, That a Committee on Programme be appointed annually by the Association, consisting of seven members, who shall have power to formulate the Programme for the workings of the Association in its meetings, and in so doing, shall co-operate with the local committee.

Second, That the title to all papers to be read by members of the Association, shall be sent to the Chairman of the Committee, at least thirty days before the meeting of the Association, and that this Committee appoint and notify the members who shall lead in the discussion of such papers, and shall notify all members of the Association as to the programme to be followed.

Third, That this resolution shall not in any way or manner, abridge the right of any member to read a voluntary paper, or to take part in these discussion.

Dr. Hardon, of Atlanta, presented the following names for the Committee on Programme. Upon motion they were duly appointed :

Drs. H. P. Cooper, S. C. Benedict, T. M. Holmes, J. J. Hill, W. H. Doughty, Jr, W. F. Westmoreland, K. P. Moore.

Dr. S. C. Benedict offered a resolution changing the present method of selecting district committees to report on special subjects. Dr A. W. Calhoun, offered as an amendment, that the number of the District Committee be ten, one from each Congressional District. The amended resolution passed as follows :

Be it Resolved, That the power of the Nominating Committee shall be restricted to the nomination of officers of the Association, and that a special committee consisting of one member from each Congressional District, shall be appointed by the Secretary, whose duties shall be to name the members in each district, to report upon the special subjects for each succeeding meeting, and that the committee be known as the Committee of Districts.

The Secretary appointed the following Committee.

First District—R. J. Nunn, Savannah ; Second District—B. R. Doster, Blakely ; Third District—A. A. Smith, Hawkins-

ville; Fourth District—A. W. Griggs, West Point; Fifth District—G. G. Roy, Atlanta; Sixth District—R. O. Cotter, Macon; Seventh District—T. M. Holmes, Rome; Eighth District—G. W. Mulligan, Washington; Ninth District—L. G. Hardman, Harmony Grove; Tenth District—Eugene Foster, Augusta.

Dr. S. C. Benedict, moved the adoption of the following resolution, and it was carried unanimously:

Be it Resolved, That the Committee on Reorganization of the Association be discontinued, and that reports on Necrology be no longer read before the Association, but published in the Transactions as provided by the By-Laws.

The following voluntary papers were read:

"A More Rational Method of Treating Flexions of the Uterus," by Geo. H. Noble, M. D., Atlanta.

"What is the Matter with Me, and What Shall I Do," the case of a medical friend, presented by R. C. Word, M. D., Atlanta.

"Treatment of Hemorrhoids," by Hunter P. Cooper, M. D., Atlanta.

"Antipyrine," by K. P. Moore, M. D., Macon.

The selection of a place for the next meeting being in order, Macon and Brunswick were placed in nomination. On ballot Macon received 21 votes and Brunswick 16.

The President announced that the next meeting would be held in Macon.

The Nominating Committee reported as follows:

President—J. S. Todd, Atlanta; First Vice-President—J. B. S. Holmes, Rome; Second Vice-President—E. R. Anthony, Griffin; Secretary—K. P. Moore, Macon; Censor—B. R. Doster, Blakely.

The President announced the following :

Committee on Publication—K. P. Moore, E. C. Goodrich, T. O. Powell, H. McHatton, W. F. Holt, Wm. O'Daniel.

Committee on Necrology—Eugene Foster, G. W. Holmes, H. P. Cooper, R. J. Nunn, M. H. O'Daniel.

Committee on Prize Essays—R. J. Nunn, W. A. Love, H. F. Campbell, Robert Battey.

Committee on Arrangements—W. F. Holt, C. H. Hall, W. R. Winchester, H. J. Williams, H. McHatton.

Orator—T. M. Holmes.

Delegates to the American Medical Association—J. S. Todd, Robert Battey, Wm. O. Daniel, T. O. Powell, Eugene Foster, K. P. Moore, T. M. McIntosh, R. C. Word, J. B. S. Holmes, H. B. McMaster, W. F. Westmoreland, A. W. Calhoun, E. H. Richardson, R. J. Nunn, E. C. Goodrich, H. McHatton, W. F. Westmoreland, Jr., J. H. Goss, T. S. Dekle, C. H. Colding, P. L, Cortelyon, G. W. Mulligan, B. R. Doster, J. W. Baily, W. H. Doughty, Jr., W. A. Love, W. B. Wells, R. B. Barron, R. H. Taylor.

By Dr. T. M. Holmes :

Resolved, That the following Resolutions adopted by the American Medical Association at its Session at Buffalo, in 1888, Minneapolis, 1882, and St. Louis, 1886, be endorsed by the Georgia Medical Association, in Convention assembled at Rome, Georgia, 1888.

Resolved, That in view of the alarming prevalence and ill effects of intemperance, with which none are so familiar as members of the Medical Profession, and which have called forth from eminent English practitioners, the voice of warning to Great Britian, concerning the use of alcoholic beverages, we, members of the Medical Profession of the United States, unite in the declaration that we believe alcohol should be classed with other powerful drugs.

Resolved, That we are of the opinion that the use of alcoholic liquors as a beverage, is productive of the larger amount of physical and mental disease ; that it entails diseased appetites and enfeebled constitutions upon offspring, and that it is the cause of a large percentage of the crime and pauperisms of our cities and towns, whereas, alcoholic intemperance is a prolific cause of disease, and prevention through the education of the people being one of its most powerful antidotes, therefore,

Resolved, That we approve teaching the children and youths in the schools and educational institutions in this country, as facts of hygiene, the physiological dangers and evils resulting from the use of alcoholic beverages.

Resolved, That we re-affirm the previous utterances of the American Medical Association on the use and abuse of alcohol and its effects upon the human race, and recommend instruction in hygiene in our public schools.

Laid on the table.

Dr. G. W. Mulligan, Washington, moved:

That a vote of thanks be extended to the directors of the Rome Land Company, the City Council, and Capt. J. J. Seay, for many courtesies extended to this Association during the Session.

Unanimously carried.

The following resolutions were introduced by Dr. E. H. Richardson, of Cedartown, and unanimously adopted:

Resolved, That the Medical Association of Georgia, tender to the physicians of Rome, the Rome Female College Shorter College, Mountain City Fire Company, the *Tribune* of Rome, and last but not least, modern Rome's fair daughters, the prized and peerless jewels of her hills, and also her citizens generally, our sincere and profound thanks for their generous hospitality so cordially and lavishly bestowed upon us during the Thirty-Ninth Annual Session of this Association.

Resolved, That in leaving Rome, the matchless Queen City of the South, the home of Robert Battey and the Holmes', we shall always cheerish with feelings of pleasure and gratitude the recollection of our visit and sojourn in her midst, the memory of which, "deep graven" in our hearts, "all time can ne'er efface."

The Association adjourned to meet in Macon on the third Wednesday in April, 1889.

K. P. MOORE, *Secretary.*

APPENDIX.

PRESIDENT'S ADDRESS.

Gentlemen of the Medical Association of Georgia:

Unaccustomed am I to the set phrases of speech, for the past twenty-two years having spent my dearest actions in a field of practice, away from circumstances calling me to address or preside over assemblages of any kind; therefore little can I promise that will interest you in these remarks.

No one could more keenly feel their incapacity, properly to fill the elevated position to which your too partial personal friendship has raised me, or more sincerely regret that some other more competent and worthy of the honor had not been placed here in my stead.

In entering upon the duties of the high office to which you have elected me, I wish to return my sincere thanks for the distinguished honor thus conferred, pledging you to discharge its duties to the best of my ability, appealing to your generosity to overlook my short-comings, and relying upon your mutual aid to assist me in executing those duties properly and impartially.

I regret that the Medical profession throughout the State has not heretofore properly appreciated the great advantages they could derive by joining us in our scientific investigations and the promotion of mutual respect, good feelings and professional brotherly courtesies towards each other. Prior to our organization, the profession seemed at a perpetual distance from one another, they were unacquainted and seldom met; that often in different localities existed cliques, who indulged in envyings, jealousies and faultfindings; those acheiving distinction were frequently slandered and abused by the less

fortunate; their slightest imperfections were so magnified as completely to obscure any good that otherwise might have been attained, and thus the entire profession by these bickerings and jealousies was injured in the estimation of the public. It now seems that this Association is engendering a new order, and each member being so engaged in endeavoring to improve himself and thereby elevating his own standing in the profession, that he has less time to devote to the study of his neighbors faults, nor magnify or discuss before the laity his seeming defects.

Specialist in the Science of Medicine have so much enlarged all its different departments by their minute researches and rapid progress, that every moment of a physician's time, apart from professional duties, is occupied, if he attempts to keep himself posted on the daily advancement and improvements in our profession. If thus occupied, we have no time to devote to the faults of others. By improving ourselves in our learned science, we tend to elevate the entire profession. It is a very discernable fact that on this account, physicians are daily becoming more important factors in shaping the opinions of every community.

Before entering upon the contemplation of *What has been accomplished by individual members of the Medical Association of Georgia*, I deem it would be interesting for me to read the minutes of the convention that organized this Association, which I have copied from the April number of the *Southern Medical and Surgical Journal* of 1849.

"Editors comments:

"The meeting of the Profession in convention at Macon.

"We give place with much pleasure to the following communication on this subject, rejoicing too, to learn from other sources, that a more harmonious and profitable meeting for our time-honored profession, has never been held anywhere."

"MACON, March 22d, 1849.

"DEAR SIR—I have the honor to notify you of the official action of the late meeting of the Medical Convention and Society held in this city. In pursuance of the call emanating from the Medical College of Georgia, and concurred in by the Georgia Medical Society of Savannah and Macon, the Convention assembled at 10 o'clock on the morning of the 20th. About eighty delegates were present.

"For the purpose of preliminary organization, Dr. Thos. Hoxey of Columbus, was called to the Chair, and Dr. L. W. Burney, of Monroe county, requested to act as Secretary.

"On motion, a committee of one from each county represented, was appointed by the Chair to select permanent officers for the Convention.

"The Committee reported the following names: For President, Dr. Lewis D. Ford, of Augusta; for First Vice-President, Dr. R. D. Arnold, of Savannah; for Second Vice-President, Dr. Thomas R. Lamar, of Macon; for Secretary, James M. Green, of Macon; for Assistant Secretary, Dr. C. T. Quintard, of Macon.

"The Convention being thus organized, on motion, the President designated the following gentlemen a committee to draft a Constitution and By-Laws. Drs. R. D. Arnold, J. M. Green, Thos. Hoxey, Charles West, H. J. Ogilby, R. F. Dickinson and J. M. Gordon.

"After some discussion and modification, the Constitution and By-Laws were unanimously adopted. The Convention then resolved itself into 'The Medical Society of the State of Georgia.'

* * * * * * *

"The Society then proceeded to ballot for delegates to the American Medical Association. On counting the votes, it appeared that the following gentlemen were elected, viz:

Drs. Hoxey, T. F. Green, Ogilby, Strohecker, Robert Campbell, Dupree and Stevens.

"The following Committee was appointed to memorialize the Legislature on the necessity of instituting a regular rigistration of marriages, births and deaths: Drs. Arnold, Strohecker, Ogilby, G. A. Winn and G. F. Cooper.

"A resolution was introduced and adopted, that a Committee of one from each Congressional District, of which the President of the Society shall be Chairman, be appointed to address the profession at large, on the expediency of forming Auxiliary Societies and other matters. The President appointed the following: Drs. L. D. Ford, Thos. Stewardson, Charles West, E. F. Knott, W. P. Beasley, Wm. N. King, W. L. Jones and Ashbury Kingman.

"The following named gentlemen were appointed a committee to make proper arrangements for the next Annual Meeting of the Society: Drs. J. B. Wiley, Jas. LeConte, Charles Thompson, J. C. Gilbert, C. B. Nottingham, all of Macon.

"A resolution was passed that the next Annual Meeting of the Society take place in the City of Macon, on the 2d Tuesday n April, 1850.

"The Convention adjourned at 1 o'clock, P. M., on the 21st.

"The Recording Secretary will at his earliest opportunity, furnish you with a copy of the proceedings of the Convention and Society.

"Very respectfully,

"JAMES M. GREEN, M. D.,

"*Cor. Secretary, Medical Society of Georgia.*

"To PAUL F. EVE, M. D.,

"*Editor of Southern Medical and Surgical Journal.*"

Time will not permit us to refer to all who have contributed papers worthy of the highest encomiums, entitling those

members and our Association, not only to rank equal with any State in the Union, but has elicited the admiration and respect of all nations.

By referring to the roster of our honored dead, we will find the name of one who was at the organization of our Association, and who has conferred the greatest boon upon suffering humanity. Who can fully estimate or appreciate the discovery of "Anæsthesia," whereby the surgeon is enabled to perform the most intricate and painful operations, while his patient sleeps tranquil and oblivious of all pain. The mind is actually bewildered in contemplation of its immense value. Although many have striven and partially succeeded in robbing the discoverer of his immortal honor, still each day and hour, thousands of human beings throughout the civilized world, bless the name of Crawford W. Long.

Very many before me have enjoyed the teachings and writings of two eminent scholars and physicians, whose lives were so closely interwoven and passed to the "Spirit Land" almost together, that it seems fitting they should not be separated in this allusion. One, the great pioneer in Pathology and treatment of Malarial Fevers; his paper on Organic Affinity, lectures on Auscultation and Procussion—also justly celebrated for his elegant and graceful style of writing and speaking. The other, clear and precise at all times, whose courteous and genial bearing endeared him to all, who gained a world wide reputation by his remarks upon Penetrating Wounds of the Abdomen, delivered before the International Congress, in 1876, which has opened the way for much of the Abdominal Surgery of the present time. His common sense diagnosis of Dislocation of the Shoulder Joint was also a grand contribution to Surgery, leaving an impress on the history of Medicine of his day, that time will only brighten.

The transcendency of their genious is only equaled by the spotless purity of their characters. The most beautiful picture is sometimes marred, but in the lives of Lewis D. Ford, M.D., LL.D., the first president of our Association, and Louis A. Dugas, M.D., LL.D., who subsequently filled the same office, we find the component parts of their characters were as so many mutual supports, each serving to set off the brilliant qualities of the other; like two tall columns rearing their lofty heads to heaven, with no mishapen stone destroying the harmony of the two, simple in all their parts, but sub-lime in their simplicity.

But Drs. Ford and Dugas had a compeer in their beloved city, in that great teacher of obstetrics, the gentle, kind and lovable Dr. Joseph A. Eve.

Dr. R. D. Arnold, who held high positions in this and the American Medical Association, was an accomplished physician and writer, and published many papers of decided merit. Savannah has also furnished to this Association, the graceful and polished writer, Juriah Harriss, the respected Kollock, Charters, Charlton, Bullock, Charles West and J. G. Thomas, all attaining, while in life, a glory and renown which illumes the gloom of their graves.

Atlanta has contributed her John Westmoreland, Taliaferro and Gray, all of whom we knew and respected.

Macon has given us Dr. C. B. Nottingham, once president and orator, who wrote papers of merit on "Blood Letting" and "Ovariotomy;" also Drs. Hammond, Burgess and Lamar.

Columbus a Hoxey and Kirkscey. Albany her Dickersons and Davis. Griffin, the lamented Dr. J. T Banks. Forsyth, her Roddy. LaGrange, Dr. R. A. T. Ridley, all of whom reflected by their exemplary lives, honor upon our Association.

But let us contemplate the contributions of the living:

Are there any among us who is not proud of the discoverer

of the "Excito-Secretory System of Nerves," and the teacher of the "Genu-Pectoral position in Uterine Displacements, whose writings on various subjects are so extensively quoted in text books in America and Europe? Georgia's first contribution of a president for the American Medical Association, the genial and lovable Dr. Henry F. Campbell.

How useless would it be for us to mention the numerous reports of intricate surgical operations performed, or attempt to augment the well deserved reputation and attainments of Drs. Willis F. Westmoreland and A. W. Calhoun.

Rome now with becoming modesty, invites our attention to the achievements of a distinguished son, whose explorations of the hidden recesses of the female pelvis, and by the operation that bears his name, has probably contributed more towards prolonging life, and relieving female suffering, than any surgical discovery of the nineteenth century. Not only this Association, but America, nay, the age in which we live, reveres the name of Robert Battey.

Dr. Eugene Foster's contributions to Medical literature has been very extensive; his papers on "Syphilitic Diseases of the Brain," on "Small Pox," and his article on "Compulsory Vaccination," have brought forth the highest praises of all who have studied them, and also from the "American Public Health Association."

Would that time permitted us to make due reference to the scientific experiments and reports of Dr. R. J. Nunn, the learned teachings of Dr. H. V. M. Miller, papers of Drs. O'Daniel, McHatton and others, on Malarial Fevers, or to fully impress the great value of Dr. T. O. Powells address on Heredity and Environments.

Since our last Annual Meeting, death has pervaded the ranks of your officers, removing our genial, faithful and efficient Secretary, Dr. James A. Gray. By the authority

vested in the President, according to Article V, Section 5, of our Constitution, I appointed Dr. A. B. Ashworth to that office, until a successor can be elected at this meeting. Finding that the Secretary's position to be very laborious, requiring not only a great deal of time, but actual expense, and without compensation, I therefore respectfully recommend that the Secretary be paid $150.00 per annum; further, on account of the responsibility and trouble of said position, that the Treasurer be paid $100.00 if our financial condition will allow.

At this meeting the report of your Committee on Reorganization will come up for final action. There will be much other business of importance, and in order to accomplish it all in the short time allowed, the Chair, with your assistance, will endeavor to keep the Association strictly to the subjects under discussion; by adhering to this rule, the greatest amount of business can be accomplished.

Bespeaking for the entire Association, a pleasant, harmonious and profitable meeting, I declare it open for the regular order of business.

REPORT OF SOME CASES OF HYPERTROPHIC RHINITIS, WITH RESULTS OF OPERATION FOR SAME.

BY R. O. COTTER, M. D., MACON, GEORGIA,

Formerly Assistant to the Chair of Eye, Ear and Throat Diseases, in the Atlanta Medical College.

The writings of such men as F. H. Bosworth and W. C. Jarvis, of New York, and Carl Seiler and Sajous, of Philadelphia, upon this subject are so thoroughly comprehensive and valuable as to make any further attempt here to elaborate upon them altogether unnecessary, so I will simply give the history of a few of the cases which I have recently treated. I believe that the best authorities upon the subject in this country agree that a very large proportion, if not a majority, of post-nasal, pharyngeal, and many other chronic throat troubles, are almost entirely dependent upon nasal troubles, and I may say nasal hypertrophies. These cases used to be the *Bete-noir* of the Ear, and Throat Surgeons, but with the light of investigation thrown upon this hitherto dark subject, by such men as I have mentioned above, treatment of these troubles is now really very satisfactory work.

For the full literature, and for a complete resume of the various symptoms, and effects of these conditions, I would refer to the writings of the authors before mentioned. I regard Carl Seiler's little book on diseases of the Throat, (1883) as most concise, and useful. If I were to attempt to call fuller attention to any special symptoms, I should dwell upon the very frequent, and often almost intolerable neuralgias

of the fifth nerve, especially in the eyes, frontal region and temples. The sufferings of these patients frequently make them almost desperate, and makes life miserable for them. I have also very frequently had cases of recurrent catarrhal conjunctivities from this cause, come to me to be treated for supposed granulated lids. Their eyelids would be very red and raw looking, tears would stream from their eyes, and they would suffer from an agonizing neuralgia of the eyes. Astringents would do no good, nor would the remedies usually given for neuralgia. After a few days of utter incapacity for work, the symptoms would disappear, but only to return again at any time. This was all caused by the pressure of the hypertrophied nasal tissues pressing upon the nasal nerves, and reflected thence to the eyes. This condition then frequently erroneously called "Nasal Catarrh," is called very properly "Hypertrophic Rhinitis," and the only remedy for such hypertrophies of the membranes covering the turbinated bones, sometimes simply a vascular lurgescence, and sometimes an actual hypertrophy, these deflected, and deflected and hypertrophied septums, and these ecchondroses of the septum, I say they are to be regarded as mechanical obstructions, and their removal must be effected by surgical means. When we have accomplished this, we may confidently expect to give our patients a complete cure frequently, and always great relief at least.

Case 1.—Mr. E. A., railroad engineer. Had suffered for several months from supposed Nasal Catarrh; constant hawking and clearing of throat, and spitting up a thick whitish secretion; nose stopped up nearly all the time, breathes through the mouth; no neuralgic symptoms in this case to amount to anything. Examination showed a deflected, and largely hypertrophied septum, which practically occluded the left nostril. After dilating the nostril with a Bosworth's

dilator, and anæsthetizing the parts thoroughly with a ten per cent. solution of Cocaine, the hypertrophy was sawn clear away with a Bosworth's upward saw. In about two weeks time the cut surface had healed, and in two weeks more the swelling had gone down, and now contraction of the ciratricial tissue has so further taken place that the patient expresses himself as entirely relieved of his trouble.

Case 2.—Master H. E., æt. 10. Had a very annoying naso-pharyngitis, mouth breathing, frequently buzzing in ears and partial deafness. Examination of nostrils showed it all was caused from very large hypertrophies of both lower turbinated bones. Septum was not affected. Using a spray of a ten per cent. solution of Cocaine, crystals of Chromic Acid were applied carefully by means of a curved flattened probe. After about ten seconds, the acid was neutralized and washed off with a half strength solution of Dobell's solution thrown through the nostrils with a post-nasal syringe. I will add here that it is always best to practice the patient for some days before the operation, with the use of the post-nasal syringe, because if bunglingly managed, especially in the case of children, the acid may get all over the nasal passages and do serious harm. The relief in this case, which resulted from operating upon one side, was so great that I have not yet, after waiting two months, found it necessary to repeat the operation, nor to operate on the other side. I will say here that we frequently have to repeat the operation of cauterization, and that the failure to recognize this necessity, and to explain the same to their patients, was no doubt the cause of some of the early unpopularity with some, of this method of treatment.

Case 3.—B. R., æt. 23. Had almost precisely the same hypertrophic condition as Case 2, and in addition to the same symptoms, had a very annoying hoarseness. These symptoms had existed for three or four years. The same operation was made

as in case 2, and with the result of complete relief of all the symptoms, except the hoarseness, and it has considerably improved, which it would not do in spite of all former plans of treatment.

Case 4.—Miss J., æt. 23. Has Periodical Rhinitis every year (Hay Fever). Have seen her between the attacks as well as during them. Both lower turbinated bones very greatly hypertrophied. Using a five per cent. spray of Cocaine upon them, I removed the largest hypertrophy with the cold wire snare, and the smaller one was simply snipped off with curved scissors. Her symptoms were very greatly relieved, and although she had Hay Fever at the next expected time, she assured me her symptoms were greatly modified, and that nothing like the same amount of prostration occured that she had formerly suffered from.

Case 5.—Dr. R., of South Georgia. Has suffered for several years with frontal headaches, confusion of memory at times of neuralgic attacks in the head, obstructed nasal breathing, post-nasal catarrh, and hypertrophied tonsils. Examination shows it all comes from a largely hypertrophied, and deflected septum, and also hypertrophied lower turbinated bones of both sides. The latter were imperfectly operated upon a year ago in New York, with Glacial Acetic Acid. As he could only remain with me a day or so, we operated upon the most pressing trouble, the hypertrophied septum, using the saw. In two weeks the doctor wrote me that he was perfectly delighted with the results of the operation already. With the cauterization of the hypertrophied bones, and the excision of the tonsils, he will doubtless be entirely relieved.

Case 6.—H. M., æt. 10. Had one of the little shelf-like projections on the septum—Ecchondroses as Seiler terms them—at times it puffed up, and so occluded the nostril as to cause the boy to suffer almost constantly with a naso-pharyngitis,

constantly hawking, and attempting to clear his throat, mouth breathing, etc. As we could not use the saw in so unruly a little patient, and besides as the growth was rightly judged to be rather cartilaginous, it was with some difficulty removed with the knife, after the manner advised by Seiler. Now after a few weeks time, the child's mother informs me that his trouble seems to be all disappearing.

Case 7.—Mr E., æt. 32. Book-keeper. Rundown from indoor work. Very poor *physique* and health delicate. Had a badly hypertrophied septum on one side, also hypertrophied middle turbinated bone of the same side. Suffered greatly from neuralgia in forehead, eyes and temples. After building him up somewhat with a two weeks' course of tonics, mainly Syr. Hypophosphites (Fellow's) the hypertrophy of the septum was sawn off. Freer nasal breathing followed, and also considerable, yet not entire, relief of his other symptoms. It is hoped that the freeing of the lower nasal passages will favorably affect the upper hypertrophy of the nostril. He informs me that he is comparatively free of his trouble while away from over-work, and is recreating in the country.

This shows clearly, as does some other cases I have seen, how plain it is that mental worry and over-work indoors, will by letting down the system, cause this very condition. So will confinement indoors render a person unable to resist the cold air out-doors, and by disturbing the balance of circulation in the vascular tissue of the nostrils, bring about the trouble. So will also venereal and other excesses. So will indigestion, and habitual constipation. Strange to say, some celebrated nasal surgeons say that tobacco smoking, even cigarette smoking, will not exert harm locally upon these cases. It seems to me that if I am positive of anything, it is to directly the contrary opinion. I happen to have suffered for seven years from a badly deflected and hypertrophied septum which was

removed by Dr. F. H. Bosworth, of New York, to my very great relief, and I am positive that tobacco smoking *always* seriously aggravated my trouble.

To summarize, I would say, my observation and experience is, that in small, or ordinary sized hypertrophies of the turbinated bones, the best remedy we have is the direct application of crystals of Chromic Acid. One application frequently suffices, but frequently it has to be once, or even twice repeated at intervals of two to three weeks. The Galvano-Cautery is very highly extolled, but it is so liable to get out of working order. Indeed, Dr. Bosworth assured me while I was with him in New York last Winter that he could make the Chromic Acid answer fully in place of the Galvano-Cautery.

For very large real hypertrophies of the turbinated bones—those which Cocaine will not exsanguinate—and also in the posterior hypertrophies, and adenoid growths in the posterior nares, the cold wire snare is perhaps the best instrument. As for myself, I have never been fond of the snare, perhaps because I am less expert in the use of it than with some other instruments, so I have used it less often than any other plan of removal.

For operating upon the deflected, or hypertrophied septum, I prefer to use the Bosworth's saw, which cuts by an upward and withdrawing motion, thus enabling the operator to work with safety to the floor of the nares, and posterior nasal region. The New York surgeons use a twenty per cent. solution of Cocaine, but I accomplish everything as painlessly with a ten per cent. solution as with a twenty. I have within the last half hour sawed out a very large hypertrophy, and I am sure it was just as painless as in any of the cases where I previously used a twenty per cent. If any of my readers think that spraying a nose with a twenty per cent. solution of Cocaine is not very unpleasant, just let them try it upon them-

selves, and note the exceedingly unpleasant nervousness which follows, and also the intoxication and terrible headache which it also causes.

Dr. Seiler advises the use of various other plans of operating upon the septum, and especially for the ecchondroses frequently found upon the septum. He advocates the gouge, chisel, and mallet, and also a double edge knife curved on the flat. This latter, in cases among children, ought to be very good indeed. These ecchondroses are usually in the anterior part of the septum, and are cartilaginous. I have not yet used the curved knife he advised, but have ordered one and will try it on a case I have in a few days.

As to after treatment, as soon as the operation is made, I throw in thoroughly with a Sass' atomizer, a half strength solution of Dobell's solution, and then with a De Vilbiss spray producer, apply a spray of vaseline. This may be repeated every day, for four or five days, after which I have them continue the Dobell's solution twice daily at home. I always caution them carefully against picking away the scabs which form. I just tell them to *blow* them out every day or so, just as they form. The pain in the sawing operation is very slight, and as to pain in cauterizing with Chromic acid there is *none.*

The Galvano-Cautery is slightly painful; I will add, I can positively assert, I have not seen any harmful effect follow any operation I have made of this sort. I have nothing but praise to say of the use of the saw, and Chromic acid.

MULTIPLE NEURITIS.

BY T. M. HOLMES, M. D., A. A. SURGEON U. S. M. H. S., ROME, GA.

G. H. M., æt 22, a Georgian, made application, October 18, 1886, for admission into the U. S. Marine Hospital at this port, with the following history: He had been for three years acting as clerk upon the steamboats plying the Coosa river. The nature of the position was such as to subject him to much exposure, especially during the Winter months, when freights were heavy, and the atmospheric changes extreme, and being of an imprudent disposition, he was constantly exposing himself unnecessarily, going frequently during the coldest weather without his coat, and at times, when very tired, falling asleep in the open air where the rain would beat in upon him, and on awakening would be so stiff and cold as to require much rubbing before being able to move.

Moreover, owing to the influences to which all sea-faring men are subject in a greater or less degree, he had fallen into intemperance, and though he probably had never been under the influence of alcoholic spirits in an extreme degree, yet he came under that large and unfortunate class commonly denominated "topers." As a natural result, he had become much bloated and was a chronic dyspeptic. Again, about five years ago, he was the subject of a venereal sore, and was treated by the town charlatan for syphilis. He did not know that the charlatan's diagnosis was correct, or, if correct, whether he had received the proper treatment, but had never experienced

any inconvenience from the trouble, or noticed any of the symptoms of tertiary syphilis.

For some weeks prior to the sudden onset of his disease, he had been complaining of persistent pains in the muscles of his arms, back and legs, which seemed to be of a rheumatic character. For these, I had been treating him, in the out-patient department, with salicylate of soda, but with only partial relief, when, without any other prodromic symptoms, he experienced an inability to control his lower limbs. He had started to ascend the steps leading to the upper deck of the boat, when suddenly his legs gave way and he fell prostrate to the floor. He was immediately carried to the hospital, where I saw him the following day.

I found him in a recumbent position, with an utter inability to move himself, or any part of himself, in the least.

He had "drop wrist" and "drop feet," and had no control of the muscles of volition. He could not change his arms or legs from any position into which they might helplessly fall. Every muscle in his body seemed to share, in a greater or less degree, in this general paralysis. Even the diaphragm was apparently totally paralyzed, causing the respiration to be entirely thoracic, about thirty per minute, deep and labored. The pulse was quick aud small, and numbered 130 to 135 per minute. Hyperesthæsia and hyperalgæsia were prominent symptoms, it being almost impossible to even touch him, as in the changing of his position for his comfort, without giving him great pain. There were constant and almost unbearable pains in his feet, legs and hands, characterized by a tingling sensation, paræsthesæ and formication. These pains were so great as to produce insomnia, and these *two* symptoms were the bane of his existence, from which he never failed to pray me, at each visit, for relief. They were, also, to him, unfailing barometers, always increasing in intensity a few hours

antecedent to a change of the atmosphere to a state of greater humidity. His extremities were warm to the touch, but warm applications would relieve the pain momentarily. There was almost continually an expression on the patient's face that betrayed his inner feelings of discomfort. Every muscle in his body was a "touch-me-not," which, when pressed upon, caused the patient to give quick exclamations indicative of pain. Delayed sensation was a prominent symptom. A pin being stuck into his flesh would not be felt for some seconds. The "tendon reflex" was totally absent, and he was troubled with diplopia for several days after his prostration—objects on the wall appearing double. He was totally without strength in any way whatever, even the grasp of his hands being scarcely perceptible. His appetite was at first somewhat impaired, but it gradually grew to be enormous, and, strange to say, his digestion improved correspondingly. His bowels, however, were constipated, and he voided his urine only at long intervals. This, I think, was due to as many as three causes: (1) The lack of nervous force; (2) the effect of the opiates necessary for the relief of pain, and (3) to the dread incident to his utter helplessness. Besides these annoyances, profuse night-sweats added greatly to his discomfort. His brain evidently shared to a certain extent in the general nervous derangement, as his memory was much impaired. He had no idea of time. On being asked, about the sixth week of his illness, how long he had been in bed, he replied, "about a week." He frequently repeated a question to me the third or fourth time, during one of my visits, with as much complacency as at first. After several months of illness, when his condition was much improved, he discovered that the middle finger of his left hand, on being elevated a little, would enter into the most amusing gesticulations, resembling very much the actions of a little automatic limber-jack. He was very fond of showing

this to every visitor, and sometimes did so with equal pleasure two or three times during a single visit, making the same comments upon it each time.

As the weeks passed, the most of his symptoms improved very slowly but perceptibly, with two notable exceptions, the atrophying of the muscles and the drawing of the muscular tendons. These caused the arms and legs to become exceedingly flat and thin, and the fingers and toes to be flexed to their utmost. The nails became hard and brittle, and thick in the middle, tapering toward their ends, presenting a falcon-like appearance—the so-called "hob-nail." The wrist, elbow, ankle and knee-joints were in the same flexed, and fixed, condition that the fingers and toes were. For weeks after his confinement, this general tendency to contraction caused the feet and legs to draw up in bed, and he had no power to force them down again. An attempt to forcibly correct this deformity, in any of the parts, gave great pain.

Dr. M. Allen Starr (whose graphic lectures during the Winter of 1886 and '87, before the New York Pathological Society, on Multiple Neuritis, were read with so much interest) divides the etiology of this disease into three distinct classes: (1) "Toxic cases, due to poisoning by alcohol, arsenic, and bi-sulphide of carbon;" (2) "Infectious cases, due to the direct action upon the nervous system of the infectious agents, producing diptheria, variola, typhoid and typhus fevers, severe malarial fever and tuberculosis, to which must be added the agent causing the epidemic form of neuritis known as kake or heriberi;" (3) "Spontaneous causes, due to uncertain causes, among which cold and exposure to damp and wet, and to over exertion, may find a place." I feel satisfied that alcohol and exposure to cold were the prime, if not the sole factors, in the production of this case.

The literature of Multiple Neuritis is of such recent date

that but little is known of the disease, especially in this country. It has always been confounded with locomotor ataxia and other paralyses, and not until lately has its pathology been truly understood, and the disease given its proper and distinctive place in the nosology of diseases. Instead of being a disease of the spinal cord, as one would naturally suppose from the universal paralysis, the pathologists of recent years have demonstrated the fact that, in cases presenting the above symptoms, the pathological condition really exists in the peripheral nerves. On dissecting the nerves of subjects that have died with these symptoms, and subjecting them to a careful microscopical examination, they have been found to be in various stages of degeneration. The axis-cylinders near the nerve roots have been found increased in numbers or entirely destroyed, the medulary sheaths being broken up into fatty fragments, the myelin dividing into large and small drops containing fat granules, and the degenerative mass within the Schwann sheath, consisting of myelin and axis-cylinder, has been found in various stages of absorption, the conditions varying in different subjects. (Starr.) Sometimes only certain peripheral nerves are affected, while in this case we have unmistakable evidence that the sensary, motor, and the involuntary nerves, to a certain extent, were implicated,—the general paralysis, perverted sensation and condition of the respiratory organs amply attesting this fact.

TREATMENT.

Owing to the fact that there was great tenderness over the whole length of the spinal region, a fly blister was made, about four inches broad, from the seventh cervical vertebra to the coccyx, to relieve the congestion and promote absorption. He was put upon a digestive tonic composed of Sheffer's pepsin, muriatic acid and Bower's glycerine. Iodide of potassa in compound tincture gentian was given three times a day, at

first in ten grain doses, gradually increased to thirty or forty, until one hundred grains were given each day. This salt was given for its absorbent and alterative effect, and was continued in these maximum doses for weeks, with an occasional cessation of several days in order to allow the stomach and heart a rest. Strange to say that notwithstanding that the patient was a chronic dyspeptic, these large and continued doses of iodide of potash did not impair his digestion, but it improved rapidly. Opiates were administered when necessary for the relief of pain and insomnia. This was done hypodermically, as it was soon discovered that when given any other way it required hours to secure their good results. After weeks of the above constitutional treatment, elixir of phosphate iron, quinine, and strychnia and syr. hypo. comp., were faithfully tried. Besides these efficient nerve foods, the constant electrical current was frequently employed. At first this gave great pain, but failed to produce the natural muscular contraction, the whole muscular mass of any part seeming to be one soft, flabby muscle, without tonicity. Brandy, in moderate quantities, was administered at regular intervals, as a stomachic and cardiac stimulant, and the extracts of malt and wine of cocoa were alternately employed. After several months of this line of treatment, when the hyperesthesia and hyperalgæsia had abated to a great extent, massage constituted the main treatment. This was pushed vigorously, and was followed by the most satisfactory results. The thin arms and legs soon began to thicken and to increase in volume, so that within a few weeks they would not have been recognized as the same limbs. The patient continued to improve to the eighth month of his confinement (June 13th, 1887,) when he refused to comply with the regulations of the U. S. M. H. service in being transferred to the nearest marine hospital—Mobile. Owing to this refusal, he was dropped from the service, and thus failing to receive

the necessary continuous treatment, he found, after several months, that his case was not progressing very rapidly toward a final recovery. He therefore concluded that he would like to be restored to the service, and transferred to Mobile. He was accordingly reinstated, (by order of the Surgeon-General, on the 31st day of December, 1887,) and was taken to Mobile February 11th, 1888, greatly improved by his forty days of recent treatment with massage. It had now been nearly fourteen months since the patient had fallen into my hands, the most helpless and pitiful specimen of suffering humanity I had ever seen. I had watched the case with a peculiar interest, as it was the first of the kind I had ever seen, and I had never known of a similar case to be reported from the South; nor had I ever seen a word of literature upon the disease in any medical work. I was indebted to Dr. M. Allen Starr's lectures, alone, for my information on the newly discovered disease. The patient was able, with the aid of a cane, to walk around his bed and into an adjoining room two or three weeks before his departure, and was able to sit up nearly all the way to Mobile. He returned to Rome, however, within less than sixty days, greatly reduced. The climate of the gulf coast had a very debilitating effect upon him, and, from some cause, his digestion gave way and he frequently vomited his food. He was seized with the most severe attacks of angina pectoris, recurring every few days. I saw him in two or three attacks, after his return, which were very distressing and in which he suffered exceedingly. They were promptly relieved by hypodermics of morphia, and disappeared altogether, after a few days of dieting and total prohibition of medicine. He now enjoys good health, and though still unable to do hard manual labor, I think that a few more months of moderate exercise and observance of the laws of hygiene, will make "Richard himself again."

RHEUMATISM—ACUTE AND SUB-ACUTE, WITH TREATMENT.

BY ARTHUR C. DAVIDSON, SHARON, GA.

It has been the writer's privilege during the last year to see and treat quite a number of cases of rheumatism of all varieties and degrees of progression and development.

This privilege has obtained largely on account of the relation of the writer to the Georgia Electric Mound Company, of Hillman, Ga., as its chief physician. The said Electric Mound Company own the celebrated "Electric Shaft," so called—a place largely advertised, and reputed to cure rheumatism, and kindred diseases, by what its owners choose to call "Natural Electricity"—and to which place scores of rheumatics and subjects of rheumatoid arthritis, articular ostitis, and many afflicted with other diseases, come monthly and weekly with the hope of being cured of their several maladies.

Aside from these cases, seen at the above mentioned health resort, the writer has had the privilege of treating quite a number of other cases, which have occurred from time to time in his own, and in adjoining neighborhoods, sometimes amounting almost to an epidemic, notably in the later months of 1882 and 1884.

These pseudo-epidemics came upon a time following a long continued rainy spell in the latter part of Summer, at which time there was also an alarming amount of intermittent malarial fever prevalent.

The writer surmised that inasmuch as all these cases of acute inflammatory rheumatism occurred at the same time and in the

same locality with the cases of malarial fever, they were, possibly, abnormal developments of the same malarial influence, or greatly complicated and modified by it. Acting upon this assumption, the writer combined specific anti-malarial treatment with his special treatment for acute rheumatism, and in every instance with complete success.

Apart from these two occasions, viz.: 1882 and 1884, rheumatism has been an exceedingly rare disease in this section of Georgia—only an isolated an sporadic case occurring now and then, and in widely separate sections of country.

Whatever may be the cause of this form—acute—of rheumatism; whether it be of zimotic, catarrhal, chemical, microbian, or malarial, it is evident that we have an inflammatory process simulating very closely the formative and progressive states of vessicular furuncle, but far more extensive in its seizure and more rapid in its development; far more painful; characterized by the same throbbing sensations, and, in many instances, tending to suppuration and formation of abscess; and is highly amenable to the same specific treatment.

We have reference to the local application of salicylic acid, and the internal administration of the salicylates of either sodium, potassium or ammonia.

Methylic salicylate, in the form of the oil of gaultheria, is equally as efficacious, internally administered, but is not entirely free from danger.

To illustrate the value, and also the danger, of this last powerful agent, we will introduce here several cases taken from the writer's record of rheumatic practice.

CASE 6.—Angeline C., age twelve years, well grown to age; robust and generally healthy; sanguine temperament; parents healthy farmers. Attacked November 26th. Decided rigor a little before daybreak, followed by considerable fever and much pain. Saw patient about two o'clock P. M., November 27th,

1884; found ankle and knee of one lower limb very much swollen, red, and exceedingly tender and painful, as was also the wrist of the upper extremity of the opposite side. Did not record temperature, pulse, nor respiration. Prescribed:

R. Ol. gaultheriæ,.....dr. iij.
Glycerine .....dr. ij.
Aquæ, q. s. ad .....oz. iv.

M., Sig. Take one teaspoonful every two hours, first having shaken the bottle thoroughly.

Did not see patient again, as her father reported to the writer that she was free from pain in twelve hours after commencing treatment, and was able to be up the next evening.

It may be well to remark here that this patient had had an attack in December, 1882, about as severe, that lasted several weeks under other treatment.

CASE 7.—Prof. A. B. J., age twenty-five years; nervo-bilious temperament; pale and angular; scrofulous diathesis; parents well-to-do farmers, apparently healthy; had suffered several severe attacks of acute rheumatism since he was fifteen years old, on account of which, together with other ill-health, he was compelled to leave college.

Attacked December 13, 1884. First saw him in consultation December 16, 10 o'clock A. M. Did not make strict examination, as diagnosis had already been very correctly made out by an old and very competent practitioner, who, as a matter of course, was present. Prescribed:

R. Ol. gaultheriæ.....dr. iv.
Fld. ext. gelsemini.....dr. ij.
Fld. ext. aconiti.....dr. j.
Glycerini.....
Aquæ, a. a. ad.....oz. iv. (ounces.)

M., Sig. Take teaspoonful every two hours.

All pain was relieved by ten o'clock P. M., same day, and fever was well nigh gone by the next morning. Patient slept soundly all through the night, and expressed himself as feeling quite well on the morning of the 17th.

From exposure, the patient had a relapse, or rather another attack, about Christmas, which was as promptly relieved as before, by same treatment.

CASE 9.—Mrs. C., recently married, about twenty-two years old, took considerable cold from exposure occasioned by the burning of her husband's store-building, on the night of the 24th of March, 1885; was attacked the next day with a severe rigor, which lasted several hours, followed by very high fever.

Rheumatism developed March 26th, in the right shoulder, elbow and wrist, left hip, knee and ankle, and right ankle. High fever, and pain unbearable.

The writer saw patient April 6th. Diagnosis already made. Upon examination, found tongue covered with a dirty, brownish-yellow coat, with clean border. Considerable nausea. Bowels painful; respiration apparently normal. T., 102½°; p., 128. Catamenia present. Prescribed:

R. Pil. hydrarg..... grs. xij.
Hydrarg. sub. mur.....grs. vj.

M., Ft. pil. no. ij.; one to be taken at five, and the other at nine P. M.

Quinia, in five grs. capsules; one to be taken every three hours during the next day, together with the following:

R. Ol. gaultheriæ.....dr. iv.
Fld. ext. gelsemini.....dr. iij.
Fld. ext. aconiti.....dr. jss.
Glycerini.....
Aquæ, aa. ad.....oz. iv.

M., Sig. Teaspoonful every three hours.

The writer saw patient again about five P. M., the 7th. Found pain all gone from upper joints, and continuing only in the left knee and ankle. Had taken medicine as directed. Bowels had not moved, but were not painful. No nausea, except when she took the emulsion, which she said was "just horrible."

Repeated pill of hydrarg., and continued oil of gaultheria.

Upon examination, April 8th, five P. M., found swelling and pain relieved entirely, except in left ankle, which was still red, and tender upon pressure. Found patient doing quite well on the 10th, and dismissed the case.

As before stated, this practice is, however, not free from objection, as the oil produces great cerebral disturbances in some patients.

In the third case, above, the patient could scarcely hear at all, so great was the tinnitus aurium after having taken the medicine thirty-six hours.

Miss H. D., age thirty-one. Patient and parents pious Presbyterians, and almost total abstainers, as were also her grandparents. Was attacked early in February, 1885, with severe cough; swelling in both lower extremities, with pain; considerable fever, with rapid pulse, reaching sometimes 150 per minute. Respiration from 50 to 60 per minute. Tongue, narrow, dry and red, covered with quite a number of red pappilæ; urine scant; skin dry; considerable dyspnœa, and orthopnœa well marked; mind clear. Prescribed, among other things, oil of gaultheria.

The writer was called, hurriedly, the next afternoon, to see patient, as the messenger stated that "she had gone entirely crazy."

The writer hurried to the bedside, where he found the patient very delirious; talking and gesticulating wildly, resembling, as closely as this writer ever saw, a case of mania a potu.

The oil was discontinued, and an emetic of ipecac was given. When she had vomited freely, she became perfectly quiet, and slept comfortably all night, lying down, which she had not done for many nights before.

The swellings and pain had all left the ankles and legs; cough had nearly subsided, and breathing was nearly normal for several days.

The peculiar delirium in this case was undoubtedly due to the oil of gualtheria, but in a patient who was altogether unaccustomed to drinking spirituous liquors.

Drs. Francis P. Kinnicutt (*) and H. H. Seelye (†), of New York, who have each reported quite a number of cases treated with the oil of gaultheria, and who have observed the peculiar delirium produced by it, ascribe as a reason for its peculiar effect upon some subjects, that the persons so influenced were either confirmed inebriates or accustomed to frequent indulgence in alcoholic drinks. Hence, according to their theory, those who were altogether unaccustomed to the use of such stimulants should, as a matter of course, be free from the toxical effects of the drug. The case reported by the writer (case of Miss H. D.) completely confutes the position assumed by them.

The writer suggests, in this connection, that this very valuable medicine be given in connection or along with some drug whose specific action is to aid the renal and cutaneous emunctories in the elimination of noxious and effete substances from the system.

With regard to the local application of salicylic acid, the experience of the *writer* fully corroborates the statements made with regard to it by (‡) Dr. John Auldè, of Philadelphia.

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* New York Medical Record, November 4th, 1882. † New York Medical Journal, November 3d and 10th, 1884.

‡ Local Treatment of Chronic Joint Affections, Medical Bulletin, Vol. IX., No. 7.

In quite a number of cases the local application of salicylic acid made into a soft paste by the use of lard, or olive oil, or lanoline in proportion of one part of the acid to four or five parts of the lanoline, and this ointment, or paste, spread upon a cloth and applied to the affected part, and this allowed to remain for several hours (six or eight) and then renewed, has effected rapid and complete relief without the accompanying internal administration of the medicine.

By way of parenthesis, the writer will here state that the application of the above described plaster will in *every instance* completely abort furuncles, if applied during the formation period, and will, in a very large per cent. of cases, cure those which have been fully developed up to the point of suppuration.

The use of the salicylates, in the treatment of sub-acute and chronic forms of inflammatory rheumatism, is not accompanied with the like success as in the acute form.

The writer scarcely ever uses salicylic acid in any form, in the treatment of sub-acute rheumatism, he having at his command what has proven, in his hands, to be far more valuable.

Reference is here made to the iodide of potassium as a basis, and some of the vegetable alteratives as adjuvants.

For fear this paper may assume too great length, the writer will here append two or three cases, illustrating his treatment of sub-acute rheumatism, and then bring it to a close.

Mr. A. W. J., of Florida, came to Hillman the 14th of January, 1887. Had been unable to walk for more than thirteen years. Consulted the writer January the 20th. Was found to be suffering of chronic inflammatory rheumatism, involving all the joints of the upper and lower extremities, also elbows of both arms, and one knee. Could not feed himself, nor walk. Any sudden movement of the bed would cause great pain. Some of his fingers and toes were badly distorted. Prescribed:

℞ Fld. ext. phytolaccæ decand.....oz. j.
Fld. ext. rumex crisp.....
Fld. ext. stillingiæ, aa.....oz. iij.
Iodide potas.....oz. j.
Comp. syr. sarsa., q. s. ad.....oz. xij.

M, Sig. Take one dessert spoonful, in two ounces of water, four times daily, half hour before each meal, and at bed-time; gradually increase to one tablespoonful; increase water as medicine is increased.

℞ Tr. iodine.....oz. vj.
Tr. aconite.....oz. iij.
Oil gaultheriæ.....oz. iij.

M., Sig. Use as a liniment; apply three or four times a day to the affected parts, *thoroughly*.

In six days nearly all pain had left the joints; swellings had largely disappeared; he could use his hands tolerably well; could walk by the aid of a crutch, and left for his home early in February, rejoicing over his good fortune. Was still improving when last heard from.

Judge Geo. W. W, Indiana, came to Hillman, March 5th, 1887; consulted the writer the 16th of the same month. Was suffering from sub-acute inflammatory rheumatism, involving the knees and ankles of both lower limbs. Had suffered since September the year before. Prescribed:

℞ Fld. ext. phytolaccæ.....dr. vj.
Fld. ext. rumex crisp.
Fld. ext. Stillingiæ, a. a.....oz. ij.
Comp. Syr. Sarsa. q. s. ad.....oz. viij.

M., Sig. Take one tablespoonful three times daily, one hour after each meal, in a wine-glass of water.

The Judge was entirely well in two weeks, and is still well In this case the iodide was not used.

Capt. S. P., Illinois, came to Hillman early in May, 1887. Consulted the writer May 18th. Was suffering from sub-acute inflammatory rheumatism of eight months' standing—the affected parts being the knees and ankles of both legs; could not walk without the aid of crutches and some one to hold him up; was very fleshy and quite heavy; swelling in the feet very great. Prescribed phytolacca, rumex, stillingia and iodide of potassium, as in the case of Mr. A. W. J., also using bandages to the feet as a support.

Dismissed him 14th of June, nearly entirely well; could walk nearly as well as he ever could, using nothing but a walking stick. Is still well at this writing.

Cases could be multiplied, which have come under the treatment of the writer, illustrating the value of intensive alterative treatment in these cases. The above are fair samples.

As a matter of course, if anchylosis is established, no medicinal treatment will avail anything, toward producing mobility of the joint.

With regard to the use of the potassic iodide, aided by the vegetable alteratives, the writer has never observed any untoward effects, such as the derangement of the stomach and bowels, and in but one case has he seen iodism produced—that in the case of a gentleman from Tennessee.

The writer takes much pleasure in commending his plan of treatment to the members of this Association, believing that a thorough trial will give results which will meet only your approbation and endorsement.

USE OF PEROXIDE OF HYDROGEN IN DISEASES OF THE THROAT AND NOSE.

BY P. R. CORTELYOU, MARIETTA, GEORGIA.

Having had my attention called to this medicinal agent, while on a visit to New York, last September, I decided to give it a trial, and now report a few cases, of many, in which I have used it.

"The Peoroxide of Hydrogen, H^2, 6^2, was discovered in 1818, by Thenard, a French chemist, by adding dilute acid to the peroxide of barium. It was introduced to the medical world by Dr. B. W. Richardson. It is an aqueous solution, in distilled water, of an-hydrous peroxide of hydrogen, H^2, O^2.

According to the testimony of many French and German physicians and chemists, it is a very strong anti-putrid agent.

It is a colorless, transparent liquid, and does not decompose if kept in temperature not above 68°. It is claimed, by many, to have strong antiseptic properties, and to have a specially beneficial effect on all mucous membranes, purifying and cleansing secretions, and stimulating the membrane to healthy action. Therefore, it should be a valuable therapeutic agent in all cases where there is an unhealthy and excessive secretion, on mucous membranes.

In all my cases I have used a 15-volume solution C. P., for medicinal use, as prepared by Charles Marchand, of New York, and have diluted it one-half or two-thirds, as the case demanded, using the fluid in form of fine spray, by means of compressed air, as contained in Hygienic Air Receiver, made

by the Standard Pump Manufacturing Company, of New York, and using pressure of fifty pounds to twenty pounds to square inch, with the "Sass. spray tubes."

CASE 1.—Mrs. F. Consulted me October, 1887, about her throat and nose. Examination revealed chronic pharyngitis and rhinitis, of long standing, and with excessive secretion of unhealthy mucous and hardened lumps, causing her to continually hawk and clear the throat; the dropping in the throat also causing her to cough frequently.

On inspection, found pharynx covered with tenacious, glairy mucous, and the mucous membrane of the nostrils in the same condition.

Used hydrogen peroxide, 15-volume solution, diluted one-half with Sass. spray, and pressure of thirty pounds to square inch; throwing spray in throat, and also through both nostrils. Then applied a solution of tinct. iodine, one drachm; bromide potassium, twenty grains; glycerine six drachms, to the throat and posterior nares. This line of treatment was continued every other day for two weeks.

The improvement was rapid and marked, and the patient gained in flesh and strength, and was relieved of the hawking and dropping of the mucous in the throat.

CASE 2.—Mrs. C. Consulted me October 15th, 1887. Had suffered with nasal and pharyngeal catarrh, so that she was constantly clearing throat and nose. Also troubled with deafness and ringing in the ears. Examination showed throat inflamed, mucous follieles enlarged, and hardened masses of greenish mucous behind soft palate. Used hydrogen peroxide, 15-volume solution, diluted one-third with spray, forty pounds to the square inch, to the throat and nose, thus cleansing membrane thoroughly, and then applied the solution of iodine, potash and glycerine. This treatment used every other

day. Patient improved rapidly, and, in course of few weeks, was so much relieved that she discontinued treatment.

CASE 3.—Mrs. K. Consulted me November 3d, 1887. Complained of cough and soreness of throat, with feverishness and loss of strength. Physical examination revealed marked deposit at apex of left lung, with tendency to softening. Throat much inflamed and irritable, causing her to cough constantly.

Used peroxide hydrogen, 15-volume solution, diluted one-half, with spray, under thirty pounds pressure to square inch; then applied a four per cent. solution of muriate of cocaine, followed by the iodine, potash and glycerine solution.

The treatment relieved the throat very much, and, under it, the cough diminished and appetite and strength improved. After four weeks, the throat was feeling so much better that the treatment was only given once or twice a week, and patient has kept in good condition all Winter.

CASE 4.—Mrs. P. Consulted me December 12th, 1887, complaining of cough, fever, weakness, and much pain and distress in the throat, causing pain in eating.

Examination revealed extensive deposit, in right lung, of catarrhal character, and evidences of softening. Throat much inflamed, and covered with glairy mucous, and very tender and irritable. Used hydrogen peroxide, 15-volumes, as spray, diluted one-half, with forty pounds pressure. Then applied four per cent. solution of muriate of cocaine, followed by iodine and potash solution.

Each application gave much relief, and eased and lessened cough.

Condition of throat improved very much, and patient was thus kept from running down.

CASE 5.—Mr. H. Consulted me January 5th, 1888. Com-

plaining of cough, soreness of throat, and obliged to be continually clearing throat.

Examination revealed slight deposit at apex of right lung, with chronic pharyngitis, mucous follicles much enlarged, and tough mucous covering pharynx. Has used tobacco freely, smoking and chewing; also stimulants, but not at present.

Used hydrogen peroxide, 15-volume solution, diluted one-half with spray, at forty pounds pressure, and applied iodine and potash solution. This treatment, continued every other day for one month, greatly relieved throat, and cough lessened and his condition much improved.

CASE 6.—March 18th, 1888. Called to see Miss M., aged about thirteen years. Said to be sick with diptheria. Examination revealed well marked case of follicular inflammation of tonsils, with numerous white patches on each.

Used hydrogen peroxide, 15-volume solution, full strength, with hand spray, every few hours. Also applied glycozone, with absorbent cotton, to parts, every few hours. The next day all appearances of deposit had disappeared on one side, and nearly all on the other, rendering it unnecessary to see the patient again.

From the results obtained in the few cases I have mentioned, and many similar ones, I have been led to conclude that in peroxide of hydrogen we have a valuable remedy in all cases of diseases of mucous membranes, whether simple or the result of germs. I should also consider it to be useful in indolent ulcers and sores.

LAPAROTOMY, WITH ATTACHMENT OF ILIUM TO INCISION, IN A CASE OF VOLVULUS.

PRESENTED TO THE MEDICAL ASSOCIATION OF GEORGIA, AT THE MEETING IN ROME, BY J. McFADDEN GASTON, M. D., ATLANTA, GEORGIA, PROFESSOR OF SURGERY, SOUTHERN MEDICAL COLLEGE.

On the fifth of April I was requested to see a patient of Dr. C. E. Murphy, who had been suffering from obstruction of the bowels for several days, and after a careful examination of the case it was concluded that an operation was necessary and justifiable.

The following statement has been kindly furnished by Dr. Murphy:

"I was called to see Mr. H., March 30th, about 12 o'clock. I found him suffering with severe pains in the bowels—more acute at times He told me that at four o'clock in the morning he was awakened with a very acute pain in the right side, about the region of the last rib. His mother gave him some Jamaica ginger, without any relief; afterwards gave him brandy and soda, but he began to grow worse. There would be intervals of ten to fifteen minutes between the pains. His mother and father gave him a great many home preparations, but with little relief.

"At 12 o'clock I was sent for, and responded immediately, as I was urged to do so.

"I gave him hypodermically one-fourth grain morphia, and left a mercurial purgative to be taken every three hours until bowels act freely.

"A messenger was sent for me at 12 o'clock that night, stating that he rested well for several hours, but was again suffering a great deal of pain. I called again. His pains this time were of a continued character, and he was vomiting up considerable amount of matter. I gave him an enema, with half pint castor in the water. He had a small action. I again gave him, hypodermically, morphia, and he slept the balance of the night. I called again, early the next morning. He seemed to be suffering more from sick stomach than pain.

"Dr. Divine saw him, with me, that morning or evening. We decided to continue to give enemas and let his stomach rest for awhile; and that night I gave him 30 drops tr. opii, and a cup sweet oil, and a one-half drop croton oil. At times he was in a great deal of pain. I had decided that there was an obstruction of the bowels.

"Dr. Willis Westmoreland, Sr., and Dr. Westmoreland, Jr., were called in consultation. We decided to give him opiates, with hopes that rest would relieve the trouble. But finally it seemed as if opiates had but little effect. His bowels were distended so much on the left side that I used the aspirator. Drew about half gallon of undigested fecal matter. He said that he felt better, and slept for several hours

"The following day he vomited a great deal of fecal matter. Strange to say, during this time, his temperature was never over 100° F., and most of the time normal. His pulse was a little fast when his sick spells were on, but generally normal.

"Dr. Westmoreland, Jr,, was called on the following day. We decided to get him in some better condition by next day, and that an operation was the last resort to relieve the obstruction.

"The following day Drs. Gaston, Harris, and Redwine, met us at about one o'clock."

Mr. Ben. H. Hollingsworth, the patient, was a vigorous young man of eighteen years of age, and after using the ordinary measures for relief, without effect, previous to my visit, a trocar was introduced by Dr. Murphy, into the abdomen at two points; the puncture in the epigastric region probably entered the transverse colon, and gave exit, as I was informed, to an extensive accumulation of flatus, the other in the umbilical region, evidently penetrated the small intestines, from which more than a quart of fluid alimentary matter was discharged. The abdominal distension was evidently lessened by this process, but the tenderness upon palpitation was very notable in all parts of the abdomen, and there was a sense of bogginess, without tympanitis, except in the line of transverse colon.

The temperature was normal, and the pulse one hundred beats to the minute; but there was great thirst, and craving for pellets of ice constantly,

The diagnosis of obstruction of the bowels having been previously made by Dr. Murphy, it was concurred in by Drs. W. F. Westmoreland, Jr., N. O. Harris, Redwine, and myself, with the conviction that nothing short of laparotomy could be relied upon for restoring the passage of the contents of the alimentary canal. We accordingly delegated Dr. Murphy to acquaint the patient and his parents with our decision, as to the prospect of a fatal termination without interference, and the probability of relief by an operation, at the same time that it would be attended with risk to life. The reply given, after understanding all the surroundings of the case, was that the proposition was accepted. After thoroughly cleansing the linia alba with soap and water, the skin was scrubbed well with a cloth saturated with spirits of turpentine. A hypodermic injection of sulph. morph., gr. ¼; sulph. atrop., gr. 1.150 was applied. The A. C. E. mixture, consisting of alco-

hol, one fluid ounce; chloroform, two fluid ounces; s. ether, three fluid ounces, was administered by Dr. Harris, so as to secure the full and constant anæsthetic influence. In the various steps of the operation I had the helping hand of Dr. Westmoreland, Jr., and the aid of Drs. Murphy and Redwine.

The abdomen was opened along the median line from the umbilicus to the pubes, when the site of the constriction was found to be in the right iliac region, and that extensive adhesions had already formed between the coils of the intestines and the abdominal walls in other portions of the cavity. With a view to the proper exploration of the nature of the trouble, and preparatory to the use of proper measures of relief, it was requisite to enlarge the opening of the abdomen, carrying the incision through the umbilicus to a point midway between it and the xiphoid cartilage. A portion of the small intestines, enormously distended and injected, was brought outside, and enveloped with towels wrung out of hot water, when it was practicable to make out clearly that there was a volvulus of the ilium within six or eight inches of its cæcal attachment. The gut was twisted upon itself, involving a coil with a diameter of two inches, and at the lapping portions of the canal the agglutination was complete, so that the entire lumen of the bowel was obliterated. On either side of this occlusion there was such a disintegration of structures that, with the handling of the parts, the contents of the alimentary canal escaped, and the only practicable proceeding which seemed available was ligation of the gut on the cæcal side and a division of the walls of the ilium beyond the necrosed tissue on the other side, with a view to its attachment in the line of union of the abdominal walls. The idea of a resection of the implicated structure with a resection of the canal, by uniting the upper and lower portions, was precluded by the lower segment being bound down by adhesive inflammation, so that

it was necessary to use an aneurism needle to pass the ligature around it, and the further difficulty of getting the upper segment entirely emptied of its contents by pressure. The cavity of the abdomen was washed with carbolized hot water, so as to cleanse it from the deleterious extravasations of fæcal matter.

After forcing out a considerable quantity of the contents of the ilium, the end of which wss carried outside of the abdominal walls, the extremity was secured with the fingers, while the abdominal incision was closed by interrupted sutures of iron dyed silk carried through all the structures, and the serous and muscular coats of the free end of the gut were caught up by several stitches, which united it, about half way from the umbilicus to the navel, to the margins of the incised parieties. The wound was covered with antiseptic gause, and a compress placed over the open orifice of the ilium, when a broad bandage was carried around the body and fastened with pins.

In the meantime the indications of failing powers had induced Dr. Harris to suspend the anæsthetic and resort to frequent hypodermic injections of sulphuric ether, with evident benefit; but we were all so impressed by the general peritonitis and the gangrenous state of the walls of ilium, near the impediment, that it was thought proper to give the family an unfavorable prognosis immediately after finishing the operation. The patient rallied from the anæsthetic, and was entirely rational for some hours, with a hopeful spirit, but sank before midnight, about ten hours after the laparotomy.

Had laparotomy been resorted to in this case within the first three days, there is good ground for the belief that it would have proved successful, and the result of delay should prompt to earlier surgical steps in future cases of obstruction.

A MORE RATIONAL METHOD OF TREATING FLEXIONS OF THE UTERUS.

BY GEO. H NOBLE, M. D., ATLANTA, GA.

The opposition to the stem-pessary shows that it falls far short of filling all the demands made upon it; not that it is ineffectual, but that it is unsafe in the hands of careless operators. There are always some who do not observe due care in the employment of any given instrument or principle, and the greater the necessity of care, more frequent will be the harm that occurs in the hands of such persons.

I do not condemn the use of the stem in skillful hands, for I have had very satisfactory results with it, yet it has been my desire to find something safer and more rational.

The absence of bad effects in my practice is due to the fact that I always observed great care, and invariably secured the necessary degree of tolerance of a foreign body in the uterine cavity before inserting the stem. The instrument that I use is the thin, flat, elastic stem of the late Dr. Taliaferro, which is better fitted for the purpose and, in a degree, less dangerous than those in common use.

Of late, however, I rarely use it as a means of straightening the uterus, as I do not lose sight of the fact that in flexions we usually encounter something more than a simple deviation from the normal axis. The association of disease makes it a more formidable an affair, without which a correction of the difficulty would be an easy and very safe matter. But after a flexed uterus becomes indurated and *fixed*, as it were, a certain amount of resistance is met with, so that in such cases a

forcible reduction of the angle virtually affects a tranmatism, and by the immediate use of the stem we add to the same.

It is very true that the difficulty can be overcome to a great degree by the use of the sound, or the introduction, from time to time, of some less irritating substance, until the uterus ceases to rebel against its presence. Having taken what I regard as a rational view of the subject, I endeavor, first, to overcome the induration and to place the organ in a soft or pliable condition, and then to straighten out the uterus bi-normally, and to keep it so until it shall have regained its normal degree of firmness. To do this, the uterus is first relieved of its engorgement, tenderness, etc., as a preparatory measure. Then small strips of antiseptic wool (sometimes cotton, such as the "raveling from the slubber,") are passed into the cervical canal, with an ordinary pair of dressing forceps, until it is well filled down to the point of flexion.

Of the anticeptics, I should give preference to iodoform but for its odor; on this account I have greatly dispensed with its use, and employ, in its stead, borasic acid, in liberal quantities, when the dressing is not to remain longer than twenty-four hours If it is to be left longer than a day, hydronapthal, salicylic and wood-tar are useful, especially the latter.

The wool should be increased from day to day until the cervix is greatly distended and its walls made thin, when a free view of its interior down to the angle may be obtained. Then the dressing is carried a little beyond the flexion, and increased carefully until the tissues at this point are thoroughly softened and the uterus somewhat straightened. If a retroflexion, it should be relieved bi-manually and placed in the anti-verted position. A vaginal pessary, large enough to keep it there, is introduced into the vagina; but after the uterus has regained its normal firmness of tissue, it should be replaced by a smaller one.

If an anti-flexion, a stem pessary may be inserted; or, if you are skillful in fitting the vaginal instruments, an anti-version pessary may be used, to overcome the effect of the wool and the influence of gravitation, for which purpose it is preferable to the stem, when *properly* used.

The commendable feature of this method of treating flexions of the uterus, are its rapid and safe inuring of the parts to the presence of a foreign body, and the induction of a soft, pliable condition of the uterus, which facilitates the reduction of the flexion, without detriment, or the use of the stem. The latter, if used at all, is simply to prevent the recurrence of the flexion while the uterus is regaining its normal firmness of tissue.

ANTIFEBRIN AS AN ANTIPYRETIC.

BY P. R. CORTELYOU, M. D., MARIETTA, GA.

Having used antipyrin to some extent as a febrifuge, and having at times some unpleasant effects from it, I have for the past eight or nine months been using antifebrine, and now report a few cases, out of many, in which I have found it to act satisfactorily.

"Antifebrin is a neutral body, prepared by heating analine with acetic acid, and when purified by successive crystalizations, it forms a white, odorless powder, with a sharp but not unpleasant taste." It is insoluble in cold water, but soluble in warm water and alcohol.

CASE 1.—J. C., colored. Was called to see patient October 26th, 1887. Found him suffering with severe headache, heavily coated tongue, and fever; the temperature under the tongue 102°. Prescribed laxative for bowels, and antifebrin, three grains in capsule, every three hours. October 27th—Pulse, 120; temperature, 101; antifebrin continued. October 28th—Temperature, 100; pulse, 100; patient sweating freely; headache relieved. October 29—Pulse, 95; temperature, 99½; ten grains antifebrin given, in divided doses, during the day. October 30th—Pulse, 90; temperature, 99; twelve grains antifebrin during day. October 31—Pulse, 90; temperature, 99; antifebrin, five grains daily until convalesence was fully established.

CASE 2.—Phebe H., aged fifteen years. Called to see patient October 4th, 1887. Examination revealed pulmonary phthisis, third stage, with hectic fever and night sweats; afternoon

temperature being 104°. Ordered antifebrin, in 5-grain capsules, at 1 P. M. and 7 P. M., with result of reducing temperature to 100°, and keeping it as low as long as antifebrin was used, and with much comfort to the patient.

CASE 3.—M. H., aged twelve years. Called to see patient latter part of October, 1887. Found her very nervous and excitable, frequently crying out with pain in chest, and cough, with fever, temperature being 102½°; general bronchitis. Ordered antifebrin, ten grains in divided doses, during the day, for fever, and gave sedative cough mixture. The antifebrin controlled the fever completely, and patient improved rapidly.

CASE 4.—Mrs. P. Called to see patient December 9th, 1887. Examination revealed phthisis pulmonalis, of catarrhal type, the left lung being considerably diseased; patient suffering with fever and night sweats; temperature in afternoon, 102½°. Ordered antifebrin, four grains at noon and at 5 P. M., daily, with effect of controlling fever while under the medicine.

CASE 5.—Mrs. W. Saw patient early in January. Examination showed phthisis, with marked deposit at left apex, with evidences of commencing softening. Hard cough, with much expectoration, and temperature in afternoon, 104°. Ordered antifebrin, five grains, at noon and at 5 P. M., which reduced temperature to 99°; and these doses, daily, kept it there. After using ten days, patient was so much improved that it was discontinued.

CASE 6.—M. C., aged thirteen years. Saw patient March 12th, 1888. Suffering with badly ulcerated throat, with heavy patches on both tonsils; high fever, temperature being 104°. Ordered five grains antifebrin; in two hours after taking, temperature reduced to 100. This dose was repeated whenever fever showed tendency to increase. Patient made rapid recovery.

CASE 7.—C. H., aged ten years. Called to see patient early in January. Found him suffering with inflammation of left lung, which assumed a typhoid form, the evening temperature being 104°. Ordered antifebrin, ten grains in divided doses, during the day, with result of reducing temperature to 100°, and holding it there. Patient made good recovery.

From my experience, therefore, with antifebrin, I am of the opinion that it is a valuable addition to our list of medicines for febrile condition of the system. It acts quickly, and with little discomfort to the patient. Sometimes it gives a feeling of chilliness and shivering, and also causes very free sweating. The advantages it has over antipyrin, are:

1st. It is much cheaper. 2d. The dose is not more than one-third as large. 3d. It does not cause the rash on the skin which antipyrin frequently does. 4th. It is not as depressing on the general system as antipyrin.

RAMIE AS A GYNECOLOGICAL DRESSING.

BY R. J. NUNN, M. D., SAVANNAH, GEORGIA.

It is now about three years since I brought to the attention of the Association the value of ramie as a gynecological dressing. Since that time, it has been employed in my practice, to the exclusion of cotton, wool, wicking, or any other dressing, and has given me satisfaction and been productive of much comfort to my patients, consequently I am now prepared to repeat all I have ever said in its favor and confirm it with the enlarged experience I can now bring to the subject.

Ramie is a fiber obtained from the bark of a perennial plant of the nettle family, of which there are several varieties, the most important being the *urtica nivea*, or white, and the urtica *utiles*, or green, the latter variety being generally preferred for practical cultivation.

From time immemorial the Chinese and Japanese have used this fiber, for the manufacture of cordage and ropes of remarkable strength, and of paper of great toughness and beauty. It is known, also, as Rhea or China grass.

The cultivation of ramie is carried on in France, Spain, Algiers and, to a limited extent, in the United States; but it is said that it can be profitably grown in this country anywhere South of Virginia.

Owing to the difficulty of removing the fiber from the bark, it has heretofore been no easy matter to procure the finished article in any quantity, and all that I have used, so far, has been imported from France; but now the International Fiber Company, of New York, has procured the necessary machine

and will, I suppose, be prepared ere long to furnish a home product at prices much below that of the imported article.

The fiber, as I now receive it, is in skiens of considerable length—sometimes as much as eight or ten feet—the rope being about two inches in diameter, like a sort of six-inch cable having a slight twist. When opened out, the fibers will be seen beautifully white, glistening, remarkably fine, smooth and quite long; moreover, when moulded into a ball, it is unusually soft and elastic—qualities which would commend it as a gynecological dressing.

To prepare a dressing, I tear from the ramie-rope a piece about fifteen or eighteen inches long, and of such thickness as to give the quantity of fiber desired. This mass will be found to be fusiform in shape; the ends are brought together, twisted, and doubled about half an inch from the extremity, and over the bight are thrown two half-hitches of a coarse thread, which is cut off at such convenient length as to serve for the removal of the dressing. The little knot thus formed need not exceed one-eighth of an inch in diameter, consequently it cannot be felt, nor does it affect the elasticity of the dressing.

The cotton tampon, of necessity, has a string around, or through the middle of the pad, so that it is practically inelastic at this point, which, of course, is a serious objection to its employment.

The lampwick tampon of Dr. Foster, while much more convenient than the cotton tampon, is even less elastic, as it is twisted in its whole length.

In the ramie tampon, as I prepare it, the elasticity of the fiber is absolutely unimpaired, and its other qualities, already enumerated, are sufficient to recommend it to the attention of the profession.

TO THE MEDICAL ASSOCIATION OF GEORGIA.

MR. PRESIDENT AND GENTLEMEN: It was my design to be with you on this occasion, but circumstances so conspired as to preclude the possibility. Hoping that your honorable and appreciative body might have a pleasant and profitable meeting, and being a member from the Second Congressional District on the Committee on Gynecology, not being able to report anything more important, I beg leave to offer a few observations in the use of *antipyrine* in gynecological practice.

If the following should be of service to your deliberations, then my purpose will have been accomplished.

CASE 1.—Mrs. B., æt. about thirty years. A delicate woman, of nervous temperament, having borne two children, when I became acquainted with the case, I found that the periodical menstrual periods were attended with severe headache, nervous prostration, muscular spasm, nausea and retching. For some time I endeavored to alleviate, or palliate, her sufferings. Used the regular prescribed methods with partial relief, yet each returning period the same distressing symptoms would return. Other physicians were called in and consulted, yet without any appreciable benefit. Having used antipyrine in other nervous and muscular troubles, I concluded to use it. My first dose proved of advantage in relieving her distressed condition. She was enabled to get some quiet sleep. Repetition of from four to six hours completed her recovery.

I have, from time to time, on these occasions, had to resort to this remedy in her case, with marked benefit to nervous excitement from which she suffered. I have found it, however, not infallible in her case, as nausea would supervene; yet the other nervous troubles could be controlled.

CASE 2.—Mrs. W., æt. about twenty-six years; nervo-lymphatic. Was confined. She was delivered favorably; progressed favorably until the fifth day.

I was called to see her. Found her with temperature 105; pulse 120; severe pain over the abdomen; mammal tense, hard, painful. She was in a semi-delirious state.

Fearing an aggravated puerperal state, as well as abscess of mammary gland, I resolved to try antipyrin. I gave her, immediately, twenty grains; returned in two hours; found her with scarcely any pain; temperature 102; pulse 100; perspiring profusely, so much so that her clothing, as well as bedding, were saturated; did not give another dose; recovered.

However, the secretion of milk was never established. The infant was forced to be fed artificially.

CASE 3.—Aet. about twenty-eight years; nervo-sanguine; a sufferer for years. Treated her for intra-cervico metritis, uveralgia, splenalgia, dyspepsia, etc. Exhausted my fund of knowledge; called others in, yet the same old song. I resolved to try antipyrin. It proved of benefit, and so much so, that, whereas, it was no unusual thing to treat her for a week or ten days in a month. I have had no occasion to treat her in four months.

CASE 4.—Aet. about forty years; brunette; eight months enciente. Called to see her. Suffering headache, backache; threatened miscarriage; temperature 104; pulse 100. Gave her twenty grains of antipyrin; fever subsided; calmed nervous excitement; produced rest and quietude, and bids fair now to reach maturity without any bad symptoms.

I have used the remedy in various cases of dysmenorrhœa, ammenorrhœa, with good apparent results.

If these few observations can be of service, either to provoke discussion or criticism, my purpose will be subserved.

Yours respectfully,

T. S. DEKLE, M. D.

Thomasville, Ga., April 16, 1888.

A CASE OF PUERPERAL TETANUS, FOLLOWING CRANIOTOMY.

BY ARTHUR C. DAVIDSON, M. D., SHARON, GA.

Mrs. Mary C.; age twenty; primipara; of rather delicate constitution and moderate health, was taken in labor, February 7th, 1888.

Labor progressed rather slowly during the day and night, but came on very decidedly on the morning of the 8th.

Toward noon of this day, the expulsive pains were so severe, without giving any promise of relief, her physician thought best to call for consultation and aid.

I was summoned, and arrived about 3 o'clock P. M., and found patient suffering very much, both physically and mentally. Upon making a vaginal examination, the os was found to be fully dilated, and the vertex presenting; the external parts, vulva, and vaginal tract were yielding and soft; pains coming on about every five minutes, and exceedingly severe, so much so that the patient would scream out with anguish.

Elliott's forceps were applied once, and Barnes' forceps twice, in the space of four hours, without avail, notwithstanding there seemed to be no narrowness or contraction in the pelvic space.

It was now thought best to deliver by sacrificial midwifery, if, indeed, the fetus was yet alive. Accordingly, at 8 P. M., the patient being thoroughly anesthetized, I proceeded to practice craniotomy, and in about a hour succeeded in delivering a fine, large male child.

The placenta came away intact—slipping out; the uterus contracting promptly, there was very little hemorrhage.

Having prepared the bed with clean, warm linen, the patient, being also dressed, was put to bed, and made comfortable by the aid of an opiate.

She slept very soundly all night, and expressed herself as feeling quite comfortable the next morning, except that the calves seemed to cramp her some and were a little sore.

She had some fever the next few days, and the soreness and stiffness in the legs had increased, and the muscles of the arms and neck and abdomen were also involved.

There was also a continuous disposition to yawn, accompanied by pain along the course of the trapezius muscle She frequently complained of a peculiar feeling in her head and neck, and said they felt all the time like they wanted to fall backwards.

There was a slight sore throat from the second day after her delivery, which increased from day to day, and on the morning of the 13th there was some difficulty in swallowing.

These conditions becoming so much aggravated—tetanus being suspected—another old and very intelligent physician was summoned on the morning of the 14th.

Notwithstanding the fact that every thing of a therapeutic nature, pertaining to the treatment of such a malady, were tested and pushed to their fullest, even to almost toxic effect, our patient grew rapidly worse from hour to hour, and died a little after midnight.

Convulsions set in early in the evening, and increased with such rapidity and force that, before death came to her relief, scarcely one minute would intervene between seizures, the least noise arousing a spasm.

The characteristic sardonic smile was prominent, and was noticed and remarked by quite a number of her friends, who did not understand its fearful import.

She was entirely unconscious during the last three hours of her existence.

It is scarcely necessary to state that every antiseptic precaution had been taken from the very beginning of the case, and the utmost care practiced with regard to cleanliness.

Puerperal tetanus is a disease of very rare occurrence, and very little is mentioned concerning it by writers upon obstetrical and gynæcological subjects. In searching for literature upon the subject, every gynæcological and obstetrical author within my reach is entirely silent upon the subject.

In Pepper's System of Medicine, a very small space is devoted to it, and the latest edition of Loomis' Practical Medicine has only this to say: "It may occur after abortion or normal delivery."

The etiology of tetanus is absolutely unknown, Dr. Shakspeare to the contrary, notwithstanding.

The late lamented Prof. L. A. Dugas, of Augusta, entertained the most practical views of tetanus, and from his lectures more sound, solid information could be obtained than from any source with which this writer is acquainted. He taught that tetanus was essentially a disease of the nervous system and non-infectious, and was always caused by a traumatism.

Later day scientists, if they cannot find a germ at the bottom of all diseases, are almost ready to deny the existence of the disease; and tetanus, with them, is not excepted.

FOUR CASES OF PUERPERAL ECLAMPSIA, WITH TREATMENT.

BY ARTHUR C. DAVIDSON, M. D., SHARON, GA.

CASE 1.—Rena C. Colored; age sixteen; well developed; well nourished, and of great muscular strength. Unmarried. Was confined with her first child 8th of May. Was attended by a colored mid-wife, who reported to the writer that everything pertaining to her parturient state was entirely natural, and that her labor was normal and easy; and that without any complaint of headache, or fever, or any other premonition whatever, she was attacked, early upon the morning of the 10th, with a very severe convulsion.

When I arrived—about 11 o'clock A. M.—she was being convulsed with the ninth seizure.

Between the seizures she was in profound coma, and could not be aroused by loud calling; but a pinch upon any part of her body would produce spasm.

She lay with her eyes wide open, and the pupils were widely dilated.

Pulse 88, full and strong and bounding. I did not take temperature, nor respiration, but proceeded to cord the arm, which, by the way, was an exceeding fine specimen of anatomy.

The tightening of the cord around the arm caused another seizure, which far surpassed the preceding ones in severity and in duration.

I opened the vena basilica and drew therefrom about fifty ounces of blood, which, when it first began to flow, was very thick, viscid, and of tarlike blackness.

Soon after the blood began to flow freely, the convulsion ceased, and soon afterward the deep, stertorous snoring ceased also.

Coma soon gave place to mild sopor, from which the patient could be easily aroused.

I gave her a cathartic dose of calomel and podophylin, and left her. She had no more convulsions, and was all right the next day.

CASE. 2.—Mrs. Tilman B. Slender, and poorly nourished. Was confined with her first child 23d of November. Was attended by a retired but very intelligent physician, in the absence of the writer.

Labor was uncomplicated and comparatively easy. Secretions and excretions all normal. Upon the forenoon of the 25th, she was attacked with a severe chill, which was followed by a very high fever in the afternoon.

It was near 2 o'clock P. M. of the same day when she was attacked by the first convulsion. I arrived at near three o'clock, at which time she had had several quite severe seizures.

Her face was very much flushed; breathing hurried and somewhat labored; pulse 142, full and strong; temperature 105; respiration 42; semi-comatose; urine quite acid, otherwise normal.

I gave her ten drops of Norwood's tinc. of veratrum viride every twenty minutes until I had given four doses.

Soon after she took the second dose she had a mild convulsion. A little while after the administration of the fourth dose she vomited freely, and the physiological effects of the drug prevailed to its fullest extent.

In a little more than one hour from the time she took the first dose, her pulse had fallen from 142 to 56 per minute,

and she was bathed in a profuse colliquative perspiration, with a sub-normal temperature.

She had no more convulsions, and no more fever, until the morning of the 27th, when the fever returned again and she again seized with convulsions.

I renewed the treatment by giving at once twenty drops of the v. viride, which promptly arrested the spasms, and she had no more.

I left a vial of the medicine, with directions to give ten drops if threatened again.

I heard no more from patient in several days; when I did, was informed that she had gotten along very well, and was able to be up a little.

It is well to state here that no other medicine was used in this case except two doses of calomel and podophylin were given soon after the second series of spasms had subsided.

CASE 3.—Mrs. Sarah R. O. Age thirty-six. Was about to be confined with her eighth child. I was summoned very early upon the morning of the 8th of February.

I found patient suffering of a blinding headache. Indeed, she said it was with difficulty that she could see at all.

This headache had been continuous throughout the night, and with more or less severity for quite a number of days previously.

The lower limbs and lower extremities were very much swollen, as were also her hands and face.

Pulse 102; temperature 100; respiration 30. Urine scant, high-colored, acid, and considerably loaded with albumen and mucous. Bowels constipated.

To relieve the severe headache, I gave a hypodermic injection of sul. morphia, one-fourth grain.

In about a half an hour thereafter, she was seized with a

very severe convulsion, which was followed by several others in rapid succession.

In order to control the convulsions, I gave patient, per os, sixty grains of chloral hydrate. This decided dose had an effect so pronounced that only one mild convulsion followed.

Believing that my patient was suffering of puerperal uræmia, and complicated with acute albuminous nephritis, I instituted the following treatment:

Directed that thirty grains of chloral hydrate be given, per os, every four hours; to be alternated with three grains of calomel every four hours. This to be kept up continuously, day and night, without regard to any cathartic effect the calomel might produce.

I remained and gave the first three or four doses, which, by alternation, came every two hours, and then left, leaving the patient quietly sleeping.

I returned after fourteen hours. Found patient still quietly sleeping. She had had no more convulsions, and bowels had not moved, notwithstanding she had taken twelve grains of calomel.

I continued the treatment steadily through the night, and until she had taken over two hundred grains of chloral and thirty grains of calomel.

Her bowels moved freely near noon, upon the 9th, and she had a copious discharge of urine at the same time.

I now discontinued the use of chloral, but continued the use of calomel, in one grain doses, every four hours, as before.

By the dawn of the 10th, she was entirely free from headache; bowels were moving freely; urine was abundant; albumen was greatly lessened, and the puffiness of the face had nearly entirely subsided.

She had a fine eleven pound boy, born alive near sundown

of the same day (10th), which now bears the name of this reporter.

It is scarcely necessary to state that my patient passed on to a rapid and complete recovery.

CASE 4.—This was a case to which the writer was called in consultation with two other physicians, November 19th.

The patient, Mrs. Anna S.; age thirty-seven; stout and muscular; had been having convulsions at intervals of from half an hour to one hour, during the last eighteen hours.

She was first attacked in the night, near midnight; awoke with a severe headache, which was soon followed by convulsions. Was near the end of her eighth month of gestation, with her sixth child. Had enjoyed pretty fair health up to the time of this attack.

There was no history of headache or dizziness; no swelling of extremities; rectal and vesical excretions apparently normal in regularity and quantity.

Her attending physician, a very accomplished and intelligent gentleman, and a member of this Association, was treating her after the most approved and rational manner.

Morphia, bromide of potassium, chloral, and blood-letting, had all been used freely, but apparently to no benefit, as each succeeding seizure seemed to be more severe, and to last longer than the ones preceding.

The writer found the following prominent symptoms: Pulse 114, full, hard and strong; temperature 102½; respiration 14; profound coma existed almost to the point of lethargia; snoring hoarse and deep; stertor prominent; eyes wide open, and pupils contracted.

We now drew, with a flexible catheter, some urine, which we submitted to a hasty analysis. To say that we found it loaded with albumen does not half express the truth. It was by far the richest specimen this writer ever examined, and he

has not examined a few. We decided from our extemporaneous analysis, by heat and nitric acid, that her urine contained sixty or seventy per cent. of albumen and mucous.

We agreed that the sole chance of her recovery lay in emptying the uterus of its contents without further delay. Chloroform being administered to its fullest effect, a thorough vaginal examination was, with difficulty, obtained, the introduction of the hand causing almost uncontrollable contortions of the whole body, notwithstanding the administration of the anæsthetic had been pushed to its utmost.

The os was found to be partly dilated and the vertex presenting. Dilatation was as rapidly performed as practicable, under the difficulties present, by means of the fingers, and after about four or five hours we succeeded in delivering the patient of a still-born, eight month, female fetus.

Very little hemorrhage occurred, the uterus contracting promptly, the secundines were safely and completely withdrawn.

The patient had only one convulsion after the delivery of the fetus; this, however, was of unusual severity, and lasted about sixteen minutes, during which time patient gave utterance to most unearthly groans, while opisthotonas was fearfully marked.

We now succeeded in getting patient to swallow a dose of five grains of calomel, and immediately instituted the treatment of calomel every four hours, with an occasional dose of chloral to keep patient quiet.

The patient had no more trouble, and was decidedly better in twenty-four hours, and after one week there was scarcely a trace of albumen to be found in her urine.

These cases, the writer desires to submit without comment, notwithstanding they are fruitful of thought.

TYPHOID FEVER, IN WHICH THE USUAL ERUPTION AND DIARRHŒA NOT PRESENT, BUT MARKED TYMPANITIC AND GASEOUS DISTENTION IN ALL.

BY C. H. RICHARDSON, M. D., MONTEZUMA, GA.

The following cases I have selected out of a number of cases of typhoid fever, all of which were characterized by same peculiarities and symptoms.

Sarah W. White; age forty-two years; married, with two living children; previous health comparatively good. Was called to see her April 23d, 1887. Had been having fever of a slight nature for two or three days previously. Temperature, at my first visit, 100; pulse 98; tongue covered with whitish coating and red pointed at end. Was hastily called on April 24th to see my patient, who had just had two or three copious hemorrhages from bowels. Gave her Plumbi Acetatum and pul. Dovers, each two grains, to be repeated every two or three hours; she progressed without any further hemorrhage. These hemorrhages did not produce the collapsed and depressed conditions which usually attend intestinal hemorrhages from ulceration of the bowels. April 25th—Temperature 101; pulse much fuller and stronger than the day before; bowels somewhat tympanitic in right illias forsa; bowels had not moved since the hemorrhages of day before; tongue coated white, with tendency to become somewhat yellow towards its base. April 26th—Temperature 102; bowels still constipated and tympanitic. Ordered sul. quiniae to be given in five-grain doses, two hours apart during morning remission; ordered

turpentine in two drop doses, to be given three or four times daily; pul. Dovers at bed time, to procure rest; nitro-muriatic acid, in three-drop doses, three times daily. There was at this time an utter repugnance for food, which continued throughout the entire attack. She was well nourished by beef extracts, milk, brandy, etc. The case progressed with little variation in temperature or condition of the patient until May 11th, when she was dismissed as convalescent. At no time was the usual typhoid eruption present, and the bowels were constipated throughout the entire attack.

Joseph W. Age nineteen years. Had always enjoyed previous good health. Was called on August 12th, 1887. Had been sick three or four days previously with light fever, which the family only considered as a malarial fever, which prevails in this section to a great extent, and unless it proves rebellious people hardly ever call a physician in attendance. Found him complaining very much of a high fever. Temperature, at 3 P. M., 102; tongue heavily coated; bowels constipated. Not satisfied as to the true nature of the disease, ordered a slight laxative, and bromide of potassium and spirits mindererus, to quiet the nervous system and act upon the emunctories; also sul. quinine, in five grain doses, two hours apart during the early morning remission. August 13th—Temperature, 9 A. M., 102; bowels had moved the night previously, which now on percussion elicited marked tympanitis; tongue still coated. I at once diagnosticated typhoid fever, and so informed the parents. Ordered quinine sul. to be continued during the morning remission, five drop doses nitro-muriatic acid dilute four or five times daily; also oil turpentine, in two or three drop doses, three times daily. The case progressed without any unusual interest, with uniform temperature, until August 22d, ten days after my first visit, when, without premonition or warning on my part, he had two copious hemor-

rhages from the bowels, which at once threw him into a collapsed condition. I, being called from town two or three hours previously by telegram, did not return until three hours after hemorrhage took place. Dr. Engram was called in during my absence, who administered an opiate, and ergot, which procured the necessary quietude of the system and checked the hemorrhages. When I returned I found my patient in a collapsed condition; cold and clammy perspiration; long and stertorous breathing; temperature sub-normal, 96½. Inquiring into the probable cause, was informed by the parents that they had that morning given him a dose of Simmons' liver regulator, without my knowledge or consent. My patient was now in a low state; death seemed imminent. Ordered hot bottles packed around him; gave him brandy and beef peptonoids freely during that night and the next day, and in twenty-four hours the thermometer gave more hope for my patient by registering 98°. Reaction then set in; my patient soon began to appear as he did before the hemorrhages. At this time there were noticed two or three rose-colored eruptions over the chest, but nowhere else on the body could any be found. The bowels remained constipated throughout the entire attack after this. The case progressed, after this time, satisfactorily. He was kept on same treatment, though highly nourished with beef peptonoids and milk, until September 12th, when he was dismissed as convalescent.

William H. Aged twelve years. Previous health not very good; always considered a puny child. Was first called on January 12th, 1888, to see him, whom his parents said had been suffering with fever for three or four days, and which they had failed to control by giving quiniae. Found him with temperature of 101½; pulse 110. Being not positive as to true nature of disease, ordered diaphoretics and quinine to be continued. On my next visit discovered some tympanitis in right

illiac forsa, and expressed my opinion that the case was one of typhoid and, owing to the previous poor health of the child, urged upon the family the necessity of good and nutritious diet from the beginning. The case progressed with uniform temperature and little change in his condition for several days, when, on day of 18th of January, the bowels became greatly distended with gas, which, from the pressure upon the diaphragm, interfered very much with his respiration, or as he expressed it, "he felt like his wind was cut off." The family became somewhat alarmed at this turn of the disease, and almost lost hope for their child. Oil turpentine was given freely by the mouth, and enemas of warm water and turpentine were given once daily (as bowels were constipated from the first), and under this treatment, for four or five days, I was glad to see these troublesome symptoms disappear. I searched in vain for the usual eruption. The bowels remained constipated throughout the entire attack. The case progressed without any unusual interest to the end of the attack, and on the 13th day of February was dismissed as convalescent.

In all these cases the bowels were constipated throughout the entire attack, which leads me to believe that constipation exists more frequently than the different authorities seem to lay stress on, although extensive ulcerations may be going on all the time; but a slight purgative, while ulceration is at its prime, given by the mouth, would greatly endanger the life of the patient. My experience has led me to believe that typhoid fever, if contagious at all, is contagious from the discharges from the bowels.

In these cases, and in all that have fallen to my lot to treat, never have I had a second case in same family following a case where the bowels were constipated. Neither has my experience led me to believe that the typhoid eruption is a com-

mon symptom. I have never been able to detect it in only one case in five.

My plan of treatment has been to give good and nutritious diet from the beginning. To support the patient, I believe to be our "sheet anchor." I give quiniae sul., from twelve to fifteen grains, during the morning remission. But I have an idea that antipyrin would answer, probably, as well in some cases, but my experience with it is limited. The cost of the drug has interfered with its being used extensively. Oil turpentine I give for its supposed healing effect upon the ulcerated bowel. As long as the tongue is dry and hard it has been my custom to give nitro-muriatic acid in five drop doses, well diluted, three or four times daily. When intestinal hemorrhages take place, I give lead and pul. Dovers, and above all, to support and stimulate the patient freely, for in this is our only hope.

THE TREATMENT OF HEMORRHOIDS.

READ BEFORE THE MEDICAL ASSOCIATION OF GEORGIA, April, 1888, BY HUNTER P. COOPER, M. D., PROFESSOR OF CHEMISTRY, ATLANTA MEDICAL COLLEGE, ATLANTA, GEORGIA.

The object of this paper is not to consider exhaustively all of the operations which have been devised for the cure of the hemorrhoidal disease, but to discuss from a practical standpoint a few of the best methods. A surgeon in general practice will obtain far better results if he thoroughly familiarizes himself with the details of two or three operations than he will by attempting to perform all of the dozen or more which have been recommended.

Hemorrhoids are naturally divided into the external and internal.

The external hemorrhoids are of far less surgical importance than the internal, and yet they are of such frequent occurrence, and are a source of so great annoyance, that it may not be out of place to say a few words about them.

A correct appreciation of the pathology of the different varieties of external hemorrhoids is absolutely essential if we expect to treat them successfully. The first variety is that form in which a small swelling appears suddenly at the anal margin, which is hard, excessively tender to the touch and bluish in color. The patient cannot walk or sit down with any comfort; there is a sense of fullness and throbbing in the lower part of the rectum. At first the patient finds great relief in the recumbent position, but as the swelling increases in size, the patient

is often unable to lie down with comfort. In those of nervous temperament, notably in women, sleep is often very much broken by painful, spasmodic contractions of the sphincter muscle. In its worst form, the patient is often confined to his bed for a number of days, and does not get entirely well for nearly two weeks.

The cause of this form of hemorrhoid is the rupture of a small branch of the inferior hemorrhoidal vein, and the escape of the blood into the surrounding tissues. Here it excites inflammation, which causes the parts to swell and become very painful. With recovery the swelling gradually disappears entirely, or else becomes converted into a painless, cutaneous tab.

This cutaneous tab forms the second variety of the external hemorrhoid. Under ordinary circumstances it remains painless, and the patient is hardly aware of its existence. It is simply an hypertrophy of the skin at the margin of the anus. When appropriate conditions are present, however, it takes on acute inflammation, becomes very painful and swollen and gives rise to the same set of symptoms as the first variety.

The third variety of external hemorrhoids is one that I have not seen described by any author, though I suppose that circumstance is due to my rather limited library. In this variety there is *no* rupture of a vein, with the formation of a hard, painful swelling, and there is *no* cutaneous tab. Ocular examination of the anus reveals a rather varicose condition of one of the veins. Pressure on this vein with the finger demonstrates the fact that there is no hardness whatever, though considerable pain is elicited. The symptoms of this variety are the same as in the other forms, though the disability is not so marked. I am particular about insisting on such a division of external hemorrhoids, because the treatment in each variety is entirely different.

The treatment of piles has brought down considerable reproach on the medical profession, and given rise to dozens of patent pile ointments and hordes of pile quacks. The day of treating all cases of hemorrhoids by astringent and anodyne ointments, without so much as even examining the patient, has gone by. Every patient presenting the symptoms of external hemorrhoids should be carefully examined in order that a correct diagnosis may be made. If the patient will not submit to an ocular, substitute a digital examination. Such an examination will often develop the fact that the patient is not suffering from hemorrhoids at all, but from fistula or fissure. The treatment of the different varieties of external hemorrhoids is very simple and effective. In the first variety, where the rupture of a small vein has led to the formation of a hard, bluish, painful tumor at the margin of the anus, the treatment consists in laying open the swelling with a sharp bistoury and turning out the clot. The venous oozing should be checked before leaving the patient; this is easily accomplished by placing over the wound a small compress, and over this a folded towel, then directing the patient to straddle the back of a chair, and thus make pressure upon the spot for ten or fifteen minutes. A simple dressing with some soothing ointment constitutes the after-treatment, and the patient is well in from twenty-four to forty-eight hours.

If the patient objects to even so simple an operation as this (and such is often the case), we must resort to some other means. Under these circumstances nothing is so grateful and efficacious as the local application of ice. The best mode of applying ice to the anal region is to crush it well in a towel, fill an ordinary rubber condom (corrupted into cundrum) with it, close its mouth with a string, put it lengthwise in the gluteal furrow and hold it in place with a T bandage. The cold diminishes the inflammation better than any other agent,

and at the same time lessens the tendency to sphincteric spasm. In addition to this, an anodyne ointment should be constantly applied to the parts, in order to keep the skin soft. The bowels should, of course, be kept open by laxatives which are gentle in their action.

If we can prevail on the patient to submit to the incision of the swelling, however, the treatment is greatly shortened.

In the second variety, where the symptoms depend upon inflammation of a pendulous tab of skin at the margin of the anus, the treatment is rapidly curative. The cutaneous swelling is seized with a pair of forceps and snipped off with a pair of sharp scissors. Very little bleeding follows this; a simple ointment is applied and the patient is soon well. In this form, pain can be abolished by injecting a few drops of a five per cent. solution of cocaine into the swelling before cutting it off.

In the third variety, where there is a varicose condition of a small vein at the margin of the anus, the symptoms depend, I think, upon two causes: First, an obstruction to the flow of the blood through the vein; second, more or less inflammation in the coat of the vein.

Examination with the finger in these cases will reveal an unusually tight condition of the internal sphincter. This contraction prevents the free return of the blood through the vein and keeps up the trouble. The treatment hinges upon this fact—stretch the internal sphincter daily by means of an appropriate rectal speculum and patient is cured in a few days. The result follows very quickly. In one case I treated, the patient had suffered, for several days, great pain in walking and sitting. The first stretching gave complete relief for two days. The symptoms then returned slightly, and it required two more stretchings to effect a cure. This method is simple and invaluable. The speculum should be very gently

introduced, and its blades gradually opened. The stretching causes considerable pain, lasting sometimes as much as an hour, but after that great relief is experienced.

Internal hemorrhoids are of vastly greater importance from a surgical standpoint than the external. They are likewise divided into three varieties: First.—The small, bright red hemorrhoid, called the capillary hemorrhoid. It projects but little above the surrounding surface, and consists of a number of enlarged and interlacing capillaries. This is the form which bleeds so profusely. It is generally easy to cure by applying strong nitric acid to its surface. Second.—The venous internal hemorrhoids. These consist of large, soft, venous tumors, which often come down during a straining effort. When reduced to their natural position in the rectum they can hardly be felt by the examining finger. Third.—The arterial internal hemorrhoid is a tumor in which arterial blood predominates. They are of much firmer consistence than the venous form, and are fed by a pretty large arterial branch.

For the treatment of venous and arterial hemorrhoids many operations have been devised. No less than twelve are enumerated by Allingham. Each of these operations has strong advocates, but it is very important to bear in mind the fact that no single one of these operations is applicable to all cases. Most of these methods I have no personal experience with, so I will confine my remarks to the following:

1st. Verneuil's method of dilatation.

2d. Hypodermic injection of carbolic acid.

3d. Allingham's method of ligature.

1. Dilatation as a method of treatment for internal hemorrhoid was discovered by Verneuil, apparently by accident, and is undoubtedly curative in the class of cases to which it is adapted. It commends itself to the laity because it has so

little of the appearance of an operation about it. It is indicated in cases where the venous element predominates in the hemorrhoid, and where for any reason a radical operation cannot be done. It is never employed in the capillary hemorrhoid and rarely in well-marked arterial tumors.

The dilatation of the sphincter may be done either by the rectal divulsor, or by the hands of the operator. In the latter case, the two thumbs are inserted into the anus and then forcibly separated. This stretching is continued until the sphincter gives way, which is known to be the case when the resistance ceases. In very muscular subjects it often requires a greater amount of force to rupture the sphincter than can be exerted by the thumbs. In such cases I use the rectal divulsor of Thebaud.

After the operation the patient should be kept in bed until the sphincter has regained its power. Sometimes this paralysis of the lower end of the gut remains permanent, causing incontinence of feces. Such an unfortunate result is more liable to occur in women than in men. In view of the possibility of such an accident, we should use great care in dilating where the sphincter is naturally weak.

2d. Injection of carbolic acid.

This operation was practiced for a long time by quacks before the regular profession adopted it.

At first all were carried away with enthusiasm by the simplicity and efficacy of the method. By and by, however, the reaction set in and numerous failures began to be reported. These failures were often attended by disastrous accidents, such as great pain, sloughing, ulceration, abscesses and fistula. Kelsey, of New York, who in 1885 made a glowing report of nearly two hundred cases in the *American Journal of Medical Sciences*, says, in 1887: "In writing now I shall use less glowing terms than I did then, but I have by no means abandoned

the practice." And again, "All went well for a time, but soon I began to be troubled with a constant succession of sloughs with their attendant pain, and the worst of the trouble was that I never knew beforehand when a slough was likely to be caused." [The Diagnosis and Treatment of Hemorrhoids. By Charles B. Kelsey, M. D., New York. George S. Davis, Detroit, 1887.]

I, myself, was called to a case in December last, in which the attending physician had injected an internal hemorrhoid with carbolic acid. He had performed the injection carefully and skillfully, but great pain followed; the hemorrhoid injected and the one adjacent became acutely inflamed. I applied a ligature to each of them, cut them off and the patient got well without a bad symptom.

In another case in my practice, the injection was followed by a painful ulcer.

It is undoubtedly true, on the other hand, that many cases are painlessly and permanently cured without confining the patient to bed, and without subjecting him to the terrors of a cutting operation. Good results are more apt to follow this treatment when the hemorrhoid is arterial in character. The technique of the operation is very simple. A solution of pure carbolic acid in glycerine or sperm oil is made of a strength varying from ten to fifty per cent. With an ordinary hypodermic syringe five minims of the solution are injected into the middle of the hemorrhoid. The tumor is then replaced and the patient allowed to go about his business. Sometimes one injection causes the tumor to disappear. In other cases it is necessary to repeat the injection once or twice.

Before considering the operation by ligature, I will make brief mention of two other operations: First, Pollock's operation of crushing; second, Henry Smith's operation with the clamp and cautery. Pollock's operation is performed by an

instrument called the screw-crusher, by the means of which the hemorrhoidal tumor is reduced to a pulpy mass. Of this operation, Allingham says, in the *International Encyclopedia of Surgery:* "In over five hundred cases treated by crushing, I have not had one death from any cause whatever."

Henry Smith's operation with the clamp and cautery has been warmly advocated in this country by Kelsey, of New York. I have no experience whatever with it, but on theoretical principles it would seem inferior to the ligature.

3d. The ligature.

The treatment of internal hemorrhoids by the ligature was brought to its present perfection by Allingham, of London, though it was originated by Salmon. This operation has stood the test of over forty years, and is to-day probably performed oftener than all the other operations put together. As to its safety, Allingham has had only one death in eighteen hundred cases of ligation. (*International Encyclopedia of Surgery, Vol. VI., p. 132.*)

Gross says: "The operation is as simple of execution as it is free from danger and certain in its results."

Van Buren says, speaking of this operation: "I have never had an unpleasant symptom." Bodenhamer says: "I have yet to encounter my first serious accident." (Quoted from Allingham's "Diseases of the Rectum.")

A private letter from Dr. Sands, of New York, states that it is the operation preferred in New York.

And yet, in the face of such opinions from such men, we find objections to the ligature. These objections are often urged by those who do not perform the operation as advised by Allingham. A patient, who is to be subjected to this operation, should have the bowels freely acted upon for two days preceding the operation, either by calomel or castor oil. On

the day appointed, a copious enema of warm water and soap-suds will complete the work of clearing out the bowels.

After etherizing the patient, the surgeon should always thoroughly divulse the sphincter, either with his thumbs or Thebaud's rectal divulsor. This is a step in the operation that cannot be too strongly insisted on. As has been pointed out, the object of this thorough stretching is two-fold. In the first place, it gives the surgeon perfect command of the field of operation. In the second place, it prevents the painful spasmodic contractions of the sphincter, which take place if the sphincter it not thus thoroughly paralyzed. The next step is to seize the hemorrhoid with a vulsellum and draw it down. Then, with a pair of sharp scissors, a furrow is cut in the mucous membrane, all around its base if the tumor be chiefly venous. If it is arterial, the lower part of the base can be pretty freely cut away from its attachments to the gut, for the arterial branch supplying it enters at its upper part. If the hemorrhoid has been long prolapsed, and has a partial cutaneous covering, the surgeon should be careful to separate it from the skin with the scissors so as to include as little skin as possible in his ligature. A ligature of strong antiseptic silk is next passed around the tumor and tightly tied in a triple knot. The hemorrhoid is then cut off, leaving sufficient stump as security against slipping of the ligature.

The rectum should then be thoroughly washed out by a 1 to 1,000 solution of bichloride of mercury, a little iodoform ointment (with vaseline) smeared over the cut surfaces, a thick compress of antiseptic gauze placed against the anus, held in place by a snug T bandage, and the patient put to bed. I am in the habit of keeping the bowels locked with opium for one full week, during which time the dressing is changed several times, and after the third day traction is gently made on the cut ends of the ligatures. At the end of the sixth day I order

a large dose of castor oil, and the following morning an enema of oil and warm water. This usually causes considerable pain, but subsequent movements of the bowels are accomplished with ease, and the patient is well.

Now as to some of the objections to the operation, and I have done. Kelsey, who advocates the clamp and cautery operation, says the following concerning the *ligature:* "It is as safe as any operation can well be, and, when properly done, it cannot fail to cure." After paying it this high compliment, he objects to it because of the great pain the patients suffer for a week after the operation.

With the vast majority of operators complete *absence* of pain is one of the strong points in favor of the operation. I am sure that if Allingham's method is faithfully carried out as to divulsion of the sphincter and cutting away of the tissues forming the lower part of the base of the hemorrhoid, pain will be but rarely encountered. In my own experience, one of the chief charms about the operation by ligature is the freedom from pain. The other objections urged by Kelsey are, the necessity of drawing off the urine for several days, the amount of blood lost during the operation, and the length of time (one week) required for a cure.

These objections "vanish into thin air" when compared with the great advantage which the ligature has over the clamp and cautery, viz., the far greater certainty of not having hemorrhage *after* the operation. Which is the more certain safe-guard against bleeding from a cut vessel, a stout piece of silk tied tightly around it or a thin crust of charred tissue?

TWO CASES OF SALIVARY CALCULUS, ONE IN STENO'S, THE OTHER IN WHARTON'S DUCT.

BY ARTHUR C. DAVIDSON, M. D., SHARON, GA.

CASE 1. Mary V.; colored. Consulted me the 6th of March, 1884, with regard to a sore place in her mouth, on the right side of her tongue, far back, which she described as feeling sometimes like a splinter sticking in the side of her mouth. She said it sometimes festered, and that she could suck blood and matter from it.

Upon questioning her, she stated that it had been troubling her ever since about Christmas, and that it would sometimes swell up.

I examined it carefully but could not detect anything more than a small pustule, situated near the os ducti stenoniani of the right side, except that there was some tumefaction and hardness involving the whole of the parotid gland.

I gave her a simple mouth wash, consisting of a solution of zinc sulphate, and directed her to call again in a few days.

You can imagine my surprise when, after a few days, she returned, bringing in her hand a quite large calculus, stating that the medicine had done "all the good, as this thing," holding up the calculus, "jumped out in my mouth this very morning."

It proved to be a salivary calculus, about ten lines in length and three lines in thickness. Was very hard, irregular and rough. It left a considerable hole from which it had slipped out, and from which a little pus exuded for a few days, and then got well.

CASE 2. Miss Mary O'K., of this town, consulted me in December last, with regard to a lump and a soreness under her tongue, stating that it had given her no little uneasiness of mind, as it had been constantly troubling her for some months.

I could detect nothing more than an enlargement beneath the tongue, somewhat upon the left side, which was tender upon pressure. I advised her to let it alone until further development. This she was loath to do. Being a constant reader of the daily public press, she has seen much about cancer of the mouth and throat and was very much afraid that she was going to have a cancer, but decided to take my advice.

She again consulted me a few days ago with regard to the matter.

There was presenting through the mouth of Wharton's duct, on the left side, the end of a small, hard substance, which came away very readily upon pressure, greatly to the relief of my fair young patient.

It proved to be a calculus, about eight lines in length and about two lines in thickness. The tumefaction soon subsided and now the cancer is nearly well.

Why is it that no mention is made in our text books with regard to this affection? Does it belong entirely to the domain of dentistry and oral surgery?

SURGICAL CASES.

1. FRACTURE OF THE SKULL, WITH CONSIDERABLE LOSS OF BRAIN SUBSTANCE—RECOVERY WITH NO UNFAVORABLE SYMPTOMS. 2. FRACTURE AND DISLOCATION OF HUMERUS, WITH FALSE JOINT—RESULT OF NATURE'S SURGERY.

BY W. Z. HOLLIDAY, M. D., HARLEM, GA.

CASE 1. April 11th, 1887. I was called this afternoon to see L. H., negro, æt. about forty. He had just been engaged in a fight, during which he was felled to the ground by a blow on his head with a stick. I find him in a deep stupor, with slow, labored pulse and irregular respiration. The blow from which he suffers was received in the left temporo-parietal region, just above and slightly in front of the ear. At this point there is an evident depression, and, on close inspection, I can see particles of brain substance around the wound. My attention is next given to his mouth, which I notice is bloody, and covered with sand. Forcing his jaws apart, I find that his tongue is almost completely severed by an ugly gash across the centre of its upper surface. I learn from those who witnessed the tragedy that he fell heavily to the ground when he was struck, and his face contained several scratches, evidently produced by the fall. The skin on his chin showed the impressions of coarse gravel, and it is evident that a large part of his weight, and the impetus of the fall, were received at this point, and the tongue being caught between the teeth, was injured as already described. I now cleanse the parts thoroughly, and having all foreign material removed, the tongue is pulled forward, the edges of the wound are brought

together and retained in position by the application of five cat-gut sutures. The head, having also been cleansed and the wound examined, is now covered with light, bandage, and I leave him to wait for a reaction before using any further operative measures.

April 12th. This A. M. found him doing very well. He slept last night, and has taken a glass of milk this morning. There is some stupor, though he can be easily aroused There is slight dilation of pupils, though it is about even in each. The bandage is now removed from his head, and on exploring the scalp wound with my little finger, I find a considerable button of bone deeply depressed. The patient is next etherized, and the scalp wound is enlarged in order to make a more thorough examination, and institute whatever operative measures may be necessary. Coming down upon the bone, the fracture is plainly outlined, and the depression is very evident, as is also the fact that meninges are ruptured and some of the cortical portion of the brain has been lost. With an elevator I managed, after several unsuccessful efforts, to raise the depressed button of bone, which I find measures one and one-half inches in its long diameter. The difficulty in removing this was due to the fact that fracture was larger on inner table than on the outer. A considerable number of fragments of bone are now easily detached from the margin of opening. When these are removed, a considerable quantity of brain substance, which had been detached by force of blow, now oozes away. The amount was estimated by myself and assistant to be fully two tablespoonfuls. The hemorrhage, which begun with the removal of bone, was controlled by application of cat-gut ligatures to the bleeding vessels. I next removed all the sharp spiculæ of bone from the margin of opening, which might later be a source of irritation to the brain. This being accomplished, the wound is thoroughly

irrigated with a 1-2000 sol. bichloride mercury, and is lightly covered with a compress of absorbent cotton, in order to be quite certain that all hemorrhage is controlled before closing the scalp wound. The patient having been allowed time to recover from effects of ether, now declares that he feels comfortable, and I leave him. Returning in six hours, the compress is removed, and I find that all hemorrhage had been controlled. I proceeded to insert drainage tube, and closed the wound with several sutures of silver wire. Pulse is now 70; temperature 101; respiration good, and I gave him ten grains quinine.

April 13th, 10 A. M. Find him comfortable and rational; able to sit up on bed and talk. Pulse 80; temperature 100 4-5; respiration 20. Complains of some uneasiness about his mouth, caused by swollen condition of the tongue. Says he is hungry. I order for him to-day eight grains quinine, every three hours, and a generous diet of gruel and sweet milk. There is considerable swelling on right side of his face—almost enough to close the eye. His general condition is good.

13th, 8 P. M. Pulse 77; temperature 100 4-5; respiration 19. Says he has suffered some during the day with pain in his head, and that it still troubles him. In order to relieve him of this, and to secure rest for the night, I give him one-fourth grain morphine subcutaneously. His bowels not having acted since injury, I order a dose of Epsom salts to be given at bed-time, and quinine in eight grain doses at six and twelve to-morrow. Milk diet is continued.

April 14th, 4 P. M. Pulse 74; temperature 100; respiration 18. Complains of soreness about head and on outer side of right hip.

16th. Pulse 70; temperature 99½; respiration 22. General condition good. Tongue is now healed. He has been ner-

vous and restless, and I give him brom. potass. twenty grains ter. in. die. He is now taking a plenty nourishment, consisting of milk and chicken broth.

18th. Pulse 76; temperature 99; respiration 20. Comfortable.

20th. Pulse 75; temperature 98; respiration 20. The dressing is now removed from his head, and I find the wound is nicely united. Sutures and tube are removed and the parts are dry and healthy, there being no discharge whatever. I apply plenty iodoform (as had been done with first dressing) and reapply the dressings.

27th. Dressing is removed again to-day, and parts are dry and clean; not one drop of pus. He is dow dismissed, convalescent. During the course of treatment there was no decided systemic disturbance. This, I think, is a little remarkable, when we consider the nature of injury and amount of brain substance lost. The highest temperature was recorded on second day, just after operation, and was 101. This probably went higher than it would have been without the operative interference. At one time there was some loss of power in muscles of expression on opposite side of face, but this was soon restored. In a few weeks he seemed just as well as he ever was in his life. I have seen him several times since, and he has had no trouble resulting from the injury. The opening in cranium is pretty well filled with a cartilaginous mass which protects the brain well. There was never any change in his mental condition after he recovered from the shock. In the management of this case, antiseptic precautions were observed as strictly as possible, carbolic solution being used for all instruments, and the bichloride mercury 1-2000 for irrigation. There was never sufficient rise of temperature to occasion discomfort, and the union, both in tongue and scalp, was complete, and by first intention.

CASE 2. This case is presented because of its rarity and of the interest that might attach to it as showing how nature acts as a surgeon. The case came under my observation five years after injury, and rather accidentally then, for I was called to treat him for a constitutional and not the local disorder. John L., aged sixty-five, had recently come from an adjoining county. Called to see him at his home, and found him suffering with muscular rheumatism. The trouble, while more or less general, was worse in left arm and shoulder, and it is only with great pain and difficnlty that he can move these parts at all. Having been stripped of his clothing, I found existing such a condition of things as is shown in figure No. 1. Here we can see on front side the bony landmarks

FIGURE I.

and the characteristic appearance of a dislocated shoulder joint. Inquiring into the history of this trouble, I am told that the only injury he was aware of having received was five years previously, while employed as wagon driver on a farm

in Lincoln county. He says at that time he was hurt while handling a heavy stick of wood. He states that his arm was very much swollen, and pained him a great deal, and that he went to a doctor for treatment. He further stated that the medical man gave him, as his only treatment, a bottle of liniment with which to rub the painful parts. After several weeks he went to work again, though, being quite lame on those parts for a long time, he was able to earn his living. Now, looking at figure 2, you can see from behind the shoulder joint as I found it. You observe here, also, the absence of rotundity on outside, and the prominence of bony landmarks. I notice that the deltoid muscle is very much atrophied, and he has very little ability to bring the arm up in vertical direction.

FIGURE 2.

He says this is as it has been quite a long time. On searching for the head of humerus, I find it separated from

the bone, about one inch below its neck, and hid away in the subscapular fossa. I find, also, on manipulating the arm,

FIGURE 3.

that there is a false joint established some three inches below the shoulder joint proper. See figure 3. I treated his rheumatism with salicylate soda, and he did well, and was out in a few days. After he was able to come to my offiee, I applied the faradic current to his shoulder, and he improved rapidly, and soon had much better use of the arm. In a little while he resumed his occupation. I have seen him a great many times since, and he goes about his business and does any light work without special inconvenience.

The last time I saw him, he was in a cotton field, and was hoeing away at a lively rate. In the foregoing history, I am unable to vouch for the truthfulness of statements made to me. The interest that attaches to this case would be the *result* rather than the *cause* or method of obtaining. It goes to show how cleverly, yet how awkwardly, nature, when unaided, acts as a surgeon.

A CASE IN SURGERY.

BY R. H. TAYLOR, M. D., GRIFFIN, GA.

In writing this report my chief object is to call attention to the fact that we cannot be too careful, as physicians, in making our diagnoses, even in those cases of seeming slight consequence.

It is too much a habit, I fear, with a goodly number of the profession to take too many things for granted, and, I may say, accept the diagnosis given by the patient himself, without sufficient inquiry and investigation for ourselves.

I cannot better illustrate my meaning than by giving a brief report of a case that came under my observation since the last meeting of our Association:

F. M. S.; white man; aged about thirty-three years; occupation, farmer, and very muscular. Family history good, and no evidence or history of any specific disease. About eight or ten years ago he made complaint to his family physician that he was suffering with "piles." Upon this statement, without any investigation of his own, he, the family physician, proceeded to fix up a "pile ointment," and thus the case was treated for several months, without the doctor's making any examination whatever of his patient's anus or rectum. Of course the case continued to grow worse, and he began to tell his neighbors how much he had suffered with piles and Doctor —— ——— could do nothing for him. Now this kind of intelligence seems to have a peculiar way of its own of disseminating itself, and it was not long before he was flooded with pamphlets and advertising sheets, in big letters,

"Sure Cure for Piles;" "No Cure, No Pay;" "Consultation Free," and all that sort of thing.

As a matter of fact, however, he took in the bait. He had suffered so much and his physician had done him no good, and then "the man talks so fair there can be no harm in trying." But to cut the matter short, he went and was fleeced by the mountebank, and was told that his piles were cured; but, alas, his relief was destined to be short-lived, and his great doctor gone with his money, and no trace left as to his whereabouts. Thus the case came into my hands.

When I first saw him and made an examination, I found two or three fissures, perfectly typical, but very deep and long, with the most tightly contracted sphincter muscle I ever saw. The size of the muscle was unusually large, and at once attracted my attention. On attempting to introduce my finger into the rectum, I met with such a vigorous spasm of this muscle that I at once ceased all further effort in that direction.

There was a small protuberance on the verge of the anus that felt hard as cartilage. Just on the inside of this teat-like projection, I found the opening of a small sinus, which the probe proved to be running back, away from the rectum, in the direction of the tip of the coccyx, to the extent of probably three quarters of an inch, and ended in a small pouch or abscess sack.

Pressure on this sack caused a drop or two of pus to start from the opening of the sinus in the verge of the anus.

I gave him ether and introduced both thumbs into the rectum, and as gently as possible, for it took all my strength, so powerful was the sphincter, completely stretched the muscle until the inside of my thumbs rested against the tuber ischii. I then opened up the sinus to the bottom and scraped out all soft granulations and the entire abscess sack. After paralyz-

ing the sphincter muscle, I examined the inside of the rectum, and found the mucous membrane perfectly smooth and healthy. I could find no evidence of the fact that he had ever had hemorrhoids, although his "pile doctor" had assured him that he had removed all his "pile tumors."

Now, had his family physician examined his anus and rectum half as carefully as he would have done his lungs, had he complained to him of symptoms pointing to disease of the respiratory organs, he would have seen at once his error, and would either have operated himself, and cured his patient, or sent him to some intelligent surgeon who would have done so. Now, may we not ask ourselves if we are not largely responsible for the existence of many quacks who travel all over the country and humbug the people after this fashion?

A little care in making a clear diagnosis in this case would have saved both time, money and suffering to the patient and reputation to the physician. Therefore, we cannot urge too strongly thorough investigation and careful examination of every case, however trivial it may at first appear.

I cannot close this report without calling attention to an accident that befell me in the operation just reported.

When my patient was coming from under the influence of the ether, the retching and straining caused a prolapsus of the rectum, the replacing of which gave my patient considerable pain. Had I taken the precaution to place a compress over the anus, and held it firmly in place with a T bandage, immediately after the operation, I would have saved my patient considerable pain and myself the self-reproach of not being more careful.

The compress and the T bandage were placed on as soon as the prolapsus was reduced, and worn with great comfort for four or five days. I found that this simple measure relieved all that uneasiness and sense of weight, or bearing down, in

the rectum that I have found so constant after this operation, in many cases requiring considerable quantities of morphine to control.

Pursuing the same line of thought, we might go still farther and make a more extended application of the principles involved in the treatment of the foregoing case.

In view of the importance of the treatment of old abscesses with fistulous openings, and, in fact, old sinuses of every description, and in any part of the body they may be located, I may venture to trespass a little more on your time.

In the treatment of this class of cases the powerful influence of modern antiseptic surgery is well illustrated. To those who have not seen for themselves the results of thorough antisepsis and scrupulous cleanliness in these operations, it will scarcely seem credible to tell them that the deepest of these sinuses may be laid freely open to the *very bottom*, all fungus granulations and every part of abscess sacks thoroughly scraped out with a sharp spoon, the wound filled with antiseptic gauze and forced to heal from the bottom by granulation, and that, too, without any considerable pain or inflammation following, and scarcely a drop of pus be discharged during the entire process; but such is even the case.

To obtain such results, we must be scrupulously clean and careful; and every instrument, no matter how perfect it may appear, must be treated just as if we saw whole hosts of bacteria and myriads of micrococci clinging to every particle of available space on its shining surface. All sponges, surgeon's and assistant's hands, and, in fact, everything that comes in contact with the wound, must be treated in the same way, never forgetting to make a free use of soap and water before using any antiseptic solution.

One point I would especially impress, and that is, *partial*

incisions and the injection of iodine, carbolic acid, etc., is but a waste of time.

Never stop short of a free opening to the *very bottom*. I might write on, page after page, detailing the minutiæ of antisepsis; but, with the abundance of literature on this subject, it is not necessary.

Suffice it to say that the best results from the use of antiseptic fluids can only be expected when preceded by thorough cleansing with soap and water.

ANTIPYRINE.

BY K. P. MOORE, M. D., MACON, GEORGIA.

Some years ago I wrote an article for The Atlanta Medical and Surgical Journal, entitled "Too much medicine." For quite a number of years, there has been a great disposition on the part of enterprising pharmacists and druggists to present their so-called "new remedies," and the consequence is, there is quite a flood-tide of new preparations fighting for recognition, and knocking for a place upon the list of our armamentarium medicum.

There can be no question of the fact that we are over-dosed; nor is it to be denied that we, as a profession, are possessed with a weakness, in common with the balance of the human family, to "run off after strange gods." Our thirst for something new makes us rather too ready to accept whatever may be presented to us, with blind faith; and sometimes valuable time is lost in experimentation.

Among the many new remedies which appear upon the scene, now and then one of real merit comes to the surface, and soon establishes itself in the confidence of the profession and is accorded a valuable place on our lists of warfare.

The remedy whose name heads this paper is yet comparatively in its infancy, and whether it will maintain itself and find a permanent place in the confidence of the profession is a question which is yet subjudice. The attention already accorded it, and the beneficial results obtained from its use, in more than one direction, make its discussion before this honorable presence, not only tolerable, but eminently proper.

It was discovered by Knorr, of Munich, and is one of the derivatives of coal-tar. It bears quite an unwieldy chemical title, and perhaps most of us would not be any wiser for the assurance that it is a dimethyloxychinizine. It is a whitish, crystaline powder, somewhat bitterish and slightly pungent taste, and very soluble in water. It was first used in fever by Fillhne, of Erlangen. It possesses this advantage over most of the chinoline derivatives, it is not usually irritating to the stomach, but rather increases appetite and digestion, though I have occasionally met with patients whose stomachs would not tolerate it. The most important function it performs in the intestine, is to inhibit the microbes of fermentation, and thus restore digestion to its normal state.

AS AN ANTIPYRETIC.

The question of antipyretics has been one of no little interest to the profession, from its earliest history until the present time. How to reduce temperature, and in this way save the concomitant fever metamorphosis, has always been an important problem in dealing with disease. It is a well established principle in the practice of medicine, that the fate of our patient is influenced immensely by the amount of heat existing in the body, be the cause what it may; hence the question of the selection of an antipyretic, possessing the most potent virtues, and the least contraindications, becomes one well worth our most careful consideration. The question naturally comes up, when considering antipyretics, purely as such, whether the simple reduction of fever would influence the final result in any given case. Reasoning from the standpoint of what seems good, sound medical philosophy, I should say, that in proportion as we are enabled to prevent tissue waste, and thus economize physical force and husband the resources of our patient, would his chances for recovery be

increased. And, hence, I should feel it a great gain in my patient's favor if I could be able, other things being equal, to keep his temperature within due bounds. Does the materia medica afford us such a remedy? Do we have a medicine which will control the temperature and at the same time not materially depress, or otherwise unfavorably influence the progress of our patient? The results obtained from the use of antipyrine, I think, authorizes an answer in the affirmative. We can almost as certainly look for the specific results of antipyrine in this direction, as we can from any known drug in its peculiar sphere.

The next most natural inquiry from every thinking mind would be as to its dangers, or the contraindications for its use. Upon its first introduction, we were taught not to administer it at all to adynamic or asthenic subjects, and I had been led, as I find many others, to think that it was admissible only in such subjects to whom we would give aconite, verat. viride, or blood letting.

My first acquaintance with the remedy, through the current medical literature, rather prejudiced me against it, and I approached its use with much trepidation and dread. I had conceived the idea that it was a powerful depressant, and was opposed to using it before I had ever given a single dose. But after one or two years' careful observation in my own practice, and two or three months in several of the principal hospitals in New York, I have come to feel that the lion has been shorn of his strength, and become converted into a potent weapon for good, whose influences are as gentle as a lamb. That antipyrine is a depressant, and capable of doing much harm in careless hands, no one will deny. Where do we find a remedy that does not? The cold douche of pure water will do the same thing. Since the commencement of the preparation of this paper, I have corresponded with several of the

prominent authorities in New York, upon this very line, and I find that it is not looked upon as a *powerful* or *dangerous* depressant, and that it is freely used in the asthenic as well as the sthenic forms of pyrexia. It is largely used in phthisis, in typhoid, and in other low forms of fever. Dr. Draper, who, after considerable experimentation, in the New York hospital, in the treatment of typhoid fever, says, "where the temperature ran as high as 104 or 105, I gave it in doses of from fifteen to thirty grains, every hour, until sixty to seventy-five grains had been given; and that the pretty uniform effect of this was to reduce the temperature of 104 or 105 to 100, or even to the normal, by gradual defervescence, within three or four hours from the administration of the first dose. The depression continued from four to nine hours, when the temperature would begin to rise, without the chill, and attain the maximum again in the course of twelve hours."

This accords with my own experience; in some instances the temperature did not regain its maximum in twenty-four hours after the discontinuance of the drug. "The pulse," says Draper, "as a rule, followed approximately the temperature curve, and the general effect upon the nervous system was such as is usually observed in antipyresis from any febrifuge."—*New York Medical Journal, April 18th, 1885.* In The Practitioner for May, 1885, J. Holland, M. D., of Moritz, Switzerland, has an article on the use of antipyrine in phthisis. He says: "I have generally found the following useful, although sometimes one and all have been extremely disappointing: Quinine, the various preparations of salicin, digitalis, aconite, kairin, and Warburg's tinctures are the principal drugs I have employed, and I find they are more efficient when given in some effervescing form. For the last eight months I have been using antipyrine; and certainly, in my hands, it has been *more successful than all the other drugs put*

together." He gives detailed notes of sixteen cases of phthisis in which antipyrine was given with most gratifying results. I am tempted to ask your indulgence, to report one of his cases which may be taken as fairly typical of the series. He says: "In July last I was consulted by a lady about her health. That morning she had spat up about two teaspoonfuls of blood, and on examining her chest I found a cavity at the left apex with extensive softning all around it; there was softening also at the right apex in front, but over a limited area. The cough was particularly troublesome, and the expectoration considerable. She informed me that fever had persisted with her in a way that had been considered remarkable by the doctors who had attended her from time to time; and for the last two months she had been taking two grs. of quinine twice and thrice daily, but, in her opinion, this had not controlled the pyrexia, for her temperature rose daily to about 102. Indeed, during the last week, it had on three occasions reached 103, being highest at from 4 to 6 P. M. On visiting her the next day, about the same hour, she told me that she had not slept so well as on the previous night; that she had had rather more fever (103 3-5 at midnight), and her cough had been more troublesome. She had taken six doses of a digitalis mixture, but as her temperature was then 103 1-5 and her pulse 118, I determined to try something else. I accordingly prescribed twenty grs. of antipyrine, every three hours while awake, until three doses had been administered, and advised the temperature being taken just before each dose was given. I saw her the next day, at the usual hour, and directly I entered the room I noticed how much better she looked. She told me that she had taken the first dose of antipyrine the previous evening, at six o'clock, and in less than an hour afterwards she felt more comfortable and less feverish. Accordingly, as much out of curiosity as anything else, she took her temperature, and

was delighted to find it was hardly 101 3-5. At 9 P. M., just before taking the second dose, it was exactly 101, and at a quarter to eleven, 100 2-5. She had slept well, only waking up when the cough troubled her; had eaten better, and altogether felt herself much better and more comfortable than she had done for weeks. Her temperature that morning, at ten o'clock, was barely 99; so she had not taken another powder until two o'clock that day, when she began to feel her temperature rising, and on using the thermometer, found it registered 101 1-5. I now tested it myself, and found it only 100 2-5, and pulse 96. My patient complained of no disagreeable or unusual sensations; on the contrary, she described her condition as being very comfortable. She continued the antipyrine, twice per day, for some days longer, and once daily for a week afterwards. During this period she had only an occasional elevation of temperature, the highest register being 100. Her cough improved; the expectoration became less, and she was able to take carriage rides. The patient remained the whole winter in St. Moritz. She has gained fifteen pounds in weight; her temperature has been normal almost ever since August. She can walk ten miles, with only a comfortable sense of fatigue, and her appetite and digestion have been excellent." "In conclusion," says Holland, "I can only say of antipyrine, that in cases of chronic fever, such as we have to deal with in consumption, it has no rival."

Experiments by Raymond Johnson, late house physician, University College Hospital, London, confirms the statements of Draper as to its excellent results in typhoid fever.

Sometimes I have found cases in which it produced nausea and vomiting, but these are rather the exception and not the rule. Sweating is another unpleasant effect; as a rule, I think we may say that the sweating is in proportion to the amount given. And in order to secure its antipyretic effect,

I have not found it necessary to administer it in depressing doses. Of course, the larger the dose the greater the antipyresis. I have learned from experience and observation to be careful in its exhibition while the patient was well under the influence of quinia, for the antipyresis and depression is, I think, proportionately increased as our patient is more or less cinchonized. My own personal observation confirms me in the belief that it is indicated in any excess of pyrexia, whether due to tranmatism, or idiopathic; whether to the puerperal state, or the result of a surgical operation.

The following cases have been selected with a view to their variety of causes, and to illustrate its usefulness in any case of fever, from whatever cause.

CASE 1. Mr. R.; age about twenty; butcher; was taken with acute bilious fever. I gave calomel and rhubarb, followed by quinine, to complete cinchonism. The patient was kept thoroughly under the influence of quinia for forty-eight hours, with cold sponging, etc. He was very much nauseated, and constantly vomited bile. I saw him between eleven and twelve o'clock on the third day, with hot, dry skin, temperature 105½, and very sick. I ordered fifteen grs. antipyrine to be given every two hours until fever subsided. Saw him again at 6.30 P. M. Temperature 99; skin wet with perspiration; had had a delightful sleep, and, as he expressed it, he felt like a new man. Continued the antipyrine every five hours until the next day, when quinia was again resorted to. and the second day I dismissed the patient.

CASE 2. Bessie S.; age eight months. Temperature 105; pulse 150; threatened with convulsions; cause of fever, probably malarial. Ordered tepid bath, and antipyrine, four grs. every two hours. Saw her six hours later; fever all gone; little patient in fine perspiration, and comfortable. Thinking the fever might be due to acute indigestion, or some ephem-

eral cause, discontinued medicine and dismissed patient. Next day was called again; patient had had chill, and now had very high fever; antipyrine ordered as before, with like rapid and gratifying results. Quinine was now given, and patient made quick recovery.

CASE 3. Maggie S.; age about twelve years. Found her in her second week of typhoid fever. Temperature, in afternoon, 104 to 104½. As is my custom, I gave her the benefit of the doubt, and instituted a course of quinia, aconite, gelsemium, etc. Failing with these measures to effect the fever, I ordered, for her, ten grs. of antipyrine, every two or three hours. Unavoidable engagements prevented me from seeing her during the next twenty-four hours. Found her with temperature 97; cool surface; very weak pulse, and very much prostrated. Discontinued antipyrine. Applied heat and covering to surface and extremities, and gave whisky freely. She reacted slowly; and though for six weeks she lingered upon the threshold of the far-off beyond, yet, in God's good providence, she finally recovered. Did the depressing influence of the antipyrine, for the thirty-six hours while under its influence, play any part in the long drawn out fever? I think not, and although I did not again give her the antipyrine, yet I think *now*, after further experience with it, if I had the case to go over again I would do so, with more caution. My fright at the depression in which I found her, deterred me from trying it with her again.

CASE 4. Mrs. S.; age thirty; mother of four children. Was delivered in September, 1886, of a fine female child. Labor natural, and progress for several days satisfactory. On the third or fourth day she took a chill, followed in few hours by temperature of 105½, and pulse 146. I at once put her upon antipyrine, fifteen grs. every two and a half hours. In ten or twelve hours patient was in profuse perspiration; tempera-

ture 99½, and feeling quite comfortable. Hoping that this ill turn meant no serious trouble, I ordered a dose of oil and turpentine, and left the result with the future. Within the next thirty-six hours another chill, followed by high fever, was but the ominous breaking out of the smouldering flames; and the rapid swelling of the abdomen, with great tenderness in the pelvic region, gave unmistakable evidence of the serious mischief going on within. Antipyrine was again pressed until the temperature reached 100½. Quinia and opium, hot vaginal carbolized douches, turpentine stupes, etc., now came in as reinforcements to the antipyrine, and for several days the warfare between a severe pelvic peritonitis and the best remedies at my command waged hot. The wonderful endurance of nature formed a sure foundation upon which we bridged her over, and though it was a close call, yet she recovered in due time.

What part did the antipyrine play in this case? I would not undertake to say that it influenced the final issue, or that it lessened the duration of the attack, but the fact remains, that as an antipyretic it did its part well, and contributed largely to the comfort of the patient. Does it not seem reasonable that, if it kept the pyrexia within due bounds, and by its now well-known analgesic properties made the patient more comfortable, her physical forces were thereby economized, her resources husbanded, and her case influenced for good in that proportion?

Within ten days from the confinement of this case, I had another case, within one block of her, who had the same trouble, went through the same history, with about the same treatment, and made a good recovery.

CASE 5. Charlie B.; age twelve. Was first seen April 23d, 1887. Had been sick and listless for several days, and presented every indication of a continued fever. Following my

habit of trying to break these fevers, I gave him colagogue cathartics, quinine, salicylates, aconite, gelsemium, etc. Several days were thus consumed. I then prescribed six grs. of antipyrine, every two hours until fever subsided, and directed the mother, who is a very intelligent lady, to discontinue, or prolong the intervals whenever the fever abated. He was thoroughly cinchonized when the antipyrine was commenced. In about eight hours after the beginning of the remedy, I was summoned in haste. I found him in a collapse; surface cool; profuse perspiration; pulse slow and weak; temperature 97. Gave hot whisky toddy, and used dry mustard friction. He soon reacted, and in two hours was sleeping happily. This is one of a number of cases in which I was satisfied of the fact that the antipyrine acted more powerfully after quinine to cinchonism. This boy had the usual turn of fifteen to twenty days fever, but got well. These cases, selected with reference to their varying character, serve to illustrate the wide range for the use of this remedy as an antipyretic. Strictly as an antipyretic, I know of no remedy superior to it; and I think it can sometimes be made to abort fevers of an inflammatory character, if seen in time. One case comes to my mind just now, where the patient, a stout, robust man, had chill, followed by high fever, rapid breathing, rales in lung, cough with bloody expectoration, and every indication of pneumonia. I put him thoroughly under the influence of antipyrine, and at my visit the next day found him sitting up, breathing easy, very little cough, no fever, and needing my services no longer.

I can commend it as a safe and very certain antipyretic, and while we cannot yet say that it will modify the course of, or abort disease, it certainly does contribute to the comfort of those who are suffering from high temperature. If carelessly used it may do harm. We should avoid the depressing effect,

and should only seek a physiological or clinical result; and no effort should be made to produce a normal temperature in a disease of which pyrexia is a prominent characteristic. For instance, if we are treating a continued fever, with a temperature of from 103 to 105, we should not attempt to keep the fever lower than 99½ to 100; or in other words we should seek what might be termed its *physiological*, rather than its *toxical* effect.

AS AN ANALGESIC.

Antipyrine was at first used and recommended *only* as an antipyretic Later it was discovered that chinoline derivatives in general have more or less analgesic property, and of course antipyrine with the rest. As to whether it possesses this property in greater proportion than the others, is a question which seems as yet unsettled. From the literature upon the subject, it is probable that it does. Clinical investigation has shown that the analgesic property is not the same as that possessed by the known anodynes, but the rationale of its action is as yet ill-understood. And hence its physiological action on the central nervous system naturally invites our interest.

Couppe states that if antipyrine be given to animals, in doses of thirty to sixty grs., the subsequent administration of strychnine is unable to produce convulsions, while the same dose of strychnine, given alone, acts fatally. Again, if a dog is poisoned by strychnine, and death appears imminent, a hypodermic of thirty grs. of antipyrine suffices to check the convulsions and to restore normal respiration. Gley, while confirming these statements, asserts that an intravenous injection of two drs. of antipyrine causes in a dog a grave convulsive attack, or, in other words, acts like strychnine. Brown-Sequard also calls attention to this singular instance, that the drug, in small doses, acts antidotal to strychnine, while in

large doses it produces a genuine intoxication of strychnine. (*The World's Med. Review.*) As an anodyne or analgesic to the various neuroses, this remedy seems destined to take high rank. As a remedy for acute rheumatism, nervous headache from any cause, and in many forms of neuralgia, it has been found to affect many remarkable cures. At a meeting of the Verein Für Innere Medicine, at Berlin, October 18th, 1885, Dr. Franke read a paper upon antipyrine, especially in the treatment of acute rheumatism. Having prescribed it in thirty-four cases of this disease, he arrives at the conclusion, supported by the observations of Lenhartz and Alexander, that its action is that of a specific. Rapid recovery ensued on its administration in nine out of thirteen cases. He said it was superior to salicylic compounds—first, in the readiness of its administration, and second, in freedom from unpleasant physiological effects. He did not know of any contraindications to its employment, and summed up to the effect that antipyrine is an energetic specific anti-rheumatic agent.

Dr. John Blake White writes, that antipyrine, when administered in masterful doses, not only promptly relieves the symptoms of headache whenever present, whether resulting from disordered digestion, disturbance of the menstrual functions, loss of sleep, undue mental effort, or uræmia, but also possesses reliable prophylactic virtues against recurrent attacks of cranial neuralgia. Says he has been much impressed with the promptness of relief which often follows the administration of even a single dose of fifteen grs. The relief usually comes on within a half hour.—*Practitioner*, November, 1886.

I have come to look upon this as one of our most valuable remedies in all cases of hemicrania, and am daily becoming more and more impressed with its potency. For some weeks previous to February 25th, 1888, I was troubled with a facial

neuralgia, due to diseased tooth. The paroxysms would be quite severe, now and then, with a constant nervous hyperesthesia of that side of my face. I had been keeping under the influence of quinine and gelsemium for some days, but never feeling entirely free from pain. On the afternoon of the above date I suffered unusually for several hours; at 5 P. M. I took my first dose of fifteen grs. of antipyrine, and in thirty minutes I was entirely free from pain, and feeling more refreshed and better every way than for several days. My pulse, when I took it, was 50; at the end of the half hour, and when I was free from pain, the pulse was 54. I had two paroxysms during the night following, and was promptly relieved each time, and went soundly to sleep, after taking fifteen grs. of antipyrine. On March 5th, I suffered for twenty-four hours with rheumatism in my shoulders and back of neck. As is the rule with our profession, I put off taking anything as long as possible, and endured the pain through the day, and until midnight. Finding that I could not sleep, I took fifteen grs. of antipyrine, and was soon wrapped in pleasant slumbers. I awoke next morning, at seven o'clock, to find my rheumatism gone; and up to date (March 9th) I have had no return of it. I have often used it in acute rheumatism, and have had larger percentages of relief, and with more promptness, from this remedy than from all others combined.

The remedy seems to be making for itself, in all neurotic troubles, quite a reputation, and clinical observations lead us to feel that it has come to stay.

It is well worth a fair trial, and, from my own personal observations, I can confidently commend it to your careful consideration. As before remarked, we should avoid giving it in toxical quantities. It is best to begin with small doses, and repeat if necessary every one to four hours until the desirable effect is obtained. The dose ranges from ten to forty

grs., and may be given in water, with some elegant syrup, or otherwise flavored to suit the taste; or it may be given in capsule, or compressed tablets. It has come to be a household remedy in my family, and my children are in the habit of resorting to it at once, for the relief of headache, without reference to the cause, and almost invariably it gives relief in less than an hour.

This paper would be incomplete, if I did not, before closing, drop a word of caution as to the incompatibility existing between antipyrine and the spirits of nitrous ether. Both possessing febrifuge properties, we are apt sometimes to combine them in our prescriptions. Antipyrine is said to possess basic properties, and forms salts with many acids. With the nitrous acid, it forms a crystalline, greenish, substance, which has received the name of isonitroso antipyrine, and which is very poisonous. Possessed as antipyrine is with these properties, and its compatibilities not yet being fully known, I am in the habit of exercising caution not to combine it with any of the acids.

ELECTROLYSIS IN DERMATOLOGY AND IN SOME OTHER DEPARTMENTS OF PRACTICAL SURGERY.

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In discussing a new method of treatment we should endeavor to divest ourselves of undue prepossession in its favor as well as of unreasoning prejudice against it. The antiseptic system in surgery and its logical foundation, the germ theory, which are now almost unreservedly accepted by the entire profession, were but a few years ago received with derision, and the battle-cry of the reactionaries, "Fort mit dem Spray," was thought to have driven the champions of the new surgery from the field. But results, by which the public always judge, resist all arguments, and few surgeons at the present day dare to ignore the results obtained by the rigid application of the antiseptic system.

All advances in science and art are met at first with indifference, ridicule, or depreciation. A rational conservatism is commendable, and the weapons just mentioned are perhaps justifiably used to prevent hasty action; but conservatism should not be allowed to become so ingrained as to be a bar to all progress; otherwise it degenerates into retrogression, whic is as injurious in science as Bourbonism is in politics.

The method of treatment which I venture to bring to your

attention, namely, Electrolysis, is at this time passing through the preliminary storm and stress period which seems to be the necessary precedent to acceptance by the profession. In some of its applications it has won for itself a place which, I venture to predict, it will maintain unshaken. In others it is still on trial, and the last word cannot yet be spoken for or against its usefulness. I shall endeavor to place before you fairly its just claims, and ask for them your careful consideration.

Electrolysis may be defined as the decomposition of a liquid into its constituent elements, the oxygen or electro-negative element being given off or collecting at the positive electrode, while the hydrogen or electro-positive element collects at the negative electrode.* The discovery of the electrolytic decomposition of water was made by Carlisle and Nicholson in the first year of the present century, but the conditions under which the process takes place, and the laws governing it, were most thoroughly studied by Faraday. To the latter observer we owe most of the definite knowledge available upon the subject.

The demonstration of the electrolysis (electrical analysis) of water was soon followed by the discovery that solutions of various salts, such as sulphate of copper, iodide of potassium, etc., could be decomposed in a similar manner by the electric current, and later it was found that organic tissues could likewise be resolved into their constituent elements. The exact manner in which this "organic analysis" is brought about is still under discussion, but the *fact* remains that it can be accomplished.

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*Oxygen, chlorine, iodine bromine and nitrogen are electro-negative elements, while hydrogen and the metals are electro-positive.

Without going into the theoretical aspect of the question, I will briefly recount some of the practical applications of this remedy, or method of treatment, limiting my remarks principally to the results obtained by my own experience.

The battery required is one that will furnish a constant current of sufficient quantity and intensity to overcome the interposed resistance. The zinc-carbon batteries, made by Waite & Bartlett, Fleming, or McIntosh, will answer the purpose very well, if kept in good order and charged with properly prepared exciting fluid. I have seen a good battery ruined by pouring sulphuric acid into the cells, under the impression that the fluid had grown weak and needed to be fortified. It may as well be understood first as last, that the physician who is unwilling to study the management of his battery, or who will not take some (often a good deal of) trouble to keep it in order, will have poor satisfaction in the use of electricity for any purpose.

In default of one of the portable batteries mentioned, from ten to twenty cells of a zinc-copper battery, or of the Leclanche pattern, will serve. The battery which I have used for several years, for all sorts of electrolytic operations, is a modification of the Daniell cell, known as the "Siemens-Halske." It is not portable, and is hence open to a serious objection, but in other respects it has no superior. It furnishes a perfectly constant current, is not liable to get out of order, and requires very little attention. Of course it is understood that a constant current, or so-called galvanic battery, is meant. A Faradic battery will not answer for electrolysis.

In medical and surgical practice electrolysis is used with the following objects:

I. REMOVAL OF SUPERFLUOUS HAIRS.

Drs. Michel and Hardaway, of St. Louis, first used electrolysis for the permanent removal of hairs growing in abnormal situations. The first named employed it successfully in relieving that troublesome malady, ingrowing eyelashes, while the latter extended its usefulness into the domain of dermatology. I have used the method, since 1882, for the destruction of superflous hairs, and believe it to be the only practical means at our command for this purpose. Of its entire success, when properly employed, there can be no longer any doubt. In addition to a proper battery, there will be needed, for the treatment of a case of hypertrichosis, the following qualifications, instruments and appliances:

1. A plentiful stock of patience.
2. A steady hand.
3. Good eyesight.
4. Proper electrodes.
5. A pair of cilia forceps.
6. A chair with head-rest.

Patience, a steady hand and good vision are essential qualifications for success.

For the positive electrode, the ordinary sponge-covered disk will answer. A needle-holder and fine needle will be required for the negative electrode.

The holder shown in the cut was devised by Dr. Hardaway, and is made by the A. M. Leslie Company, of St. Louis. It is very convenient. A fine steel sewing needle (No.12) may be used, but flexible needles made of an alloy of platinum and iridium are preferable. They are thinner than the finest steel needles, and never break and can be bent into any shape desired.*

*The needles are also manufactured by the A. M. Leslie Company, of St. Louis.

Needle-holders are sometimes made with a key to make and break the circuit, but I do not think this an advantage. The needle-holder is attached to the conducting wire from the negative pole of the battery.

FIG. 1.—HARDAWAY'S NEEDLE-HOLDER.

The forceps should have an easy spring, with flat, lightly serrated jaws, and should not have a catch.

A chair with a firm head-rest must be used. I use an ordinary cane-seat arm-chair, with adjustable head-rest, and find that it answers the purpose as well as a more complicated or expensive oculist's or dentist's chair.

The steps of the operation are as follows:

The patient is placed before a good light—avoiding direct sunlight unless modified by frosted glass—and directed to take hold of the handle of the sponge electrode, the sponge, of course, having been previously moistened. The operator then sits a little in front of, and to the right of, the patient, and takes the needle electrode in his right hand, holding a pair of tweezers with flat narrow jaws in his left. The needle is then gently insinuated into a follicle by the side of the hair until the bottom of the follicle is reached. This is manifested by a slight resistance to the onward passage of the needle. The patient is then directed to touch the sponge with the other hand, thus closing the circuit. The current will immediately pass, and the electrolytic action be made manifest by a little frothing around the needle. In some skins, also, a little wheal will be raised about the follicle. In from twenty to forty seconds the hair can be extracted with the tweezers, without the slightest resistance or pain. If the hair does not come away with perfect ease, the papilla has not been destroyed

and the needle should be permitted to remain and the current to pass a little longer. The current is broken by removing the hand from the sponge electrode. This gives less pain than if the current is closed and opened with the needle. A current from one-half to two milliamperes is sufficient.

If the hairs are very close together, they should not all be removed at the same time. The hairs should be picked out here and there; otherwise the points of irritation will be in too close proximity, and, if sufficiently intense, may produce small areas of sloughing, and leave scars. If the operation is properly performed, no visible scars should remain.

A sitting may last from fifteen to thirty minutes. Very few operators can extend it beyond the latter time. The sittings may be repeated every other day, or, in cases where time is important, every day.

After the operation a mild astringent lotion may be applied, and the patient should be directed to bathe the surface operated upon, several times a day, with hot water for five or ten minutes at a time. This tends to reduce any hyperæmia which may have been caused by the operation.

When the hair papilla has been thoroughly destroyed, the hair cannot be regenerated. In most cases, however, a number of the hairs return, showing that the destruction of the papillæ has not been complete. This happens in from five to twenty-five per cent. of the hairs removed, and depend partly upon the skill of the operator and partly upon the direction of the hairs. In some cases the hair shaft in the skin is so twisted that it is almost impossible to strike the papilla. Such hairs often require repeated removal before they are finally destroyed. The greatest success will usually be obtained on the upper lip and chin, while the hairs under the jaw will frequently return again and again, to the great disappointment of both patient and physician. Partial failure should

not discourage the operator. Persistence will surely be rewarded by success.

I may add that the older the growth of hair, the more satisfactory will be the result. In young persons, new hairs continually appear, which sometimes leads the patient to think that the operation is unsuccessful and that all the hairs are returning. The fact of the continued growth of the hair should be explained to the patient before beginning the operation. In older persons, where the growth is complete, the new crop consists simply of those hairs which had not been destroyed, and which grow out again. A second removal is followed by still fewer returns, and finally complete success is obtained. In younger individuals this period is longer deferred on account of the above mentioned out-growth of new hairs.

2. DESTRUCTION OF SMALL HYPERTROPHIES AND NEW FORMATIONS.

Warts, venereal condylomata, fibroids of the skin and pigmentary or vascular nævi can be readily removed by means of electrolysis, without leaving disfiguring scars. The process is not painful. The same needle holder above shown may be employed, but a stiff steel needle should be used as the electrode. The base of the growth is transfixed in various directions, and the current passed for a few minutes each time. The punctured tissues turn pale, and slight frothing occurs around the needle. In most cases the growth, if a wart, mole, or papillary growth, dries into a brownish crust and drops off in the course of a week or ten days, leaving a slightly pigmented spot, which soon acquires the natural color of the surrounding skin.

Vascular nævi demand a slightly different procedure. When the growth consists of an ampulla-form dilation of a

vessel, with radiating branches, the so-called "spider nævus," the needle is plunged into the center of the dilated vessel and the current allowed to pass until the red or brown color has given place to a grayish discoloration. The current is then reversed for a few minutes, making the needle electrode positive. This insures a firmer clot in the vessel and prevents subsequent hemorrhage. In the course of a week, the vessel is usually obliterated and the blemish has disappeared.

Flat vascular nævi (port wine mark) can be obliterated in a similar manner. It requires much patience on the part of physician and patient, however, if complete success is to be attained.

Hypertrophic scars and keloid growths can likewise be removed by electrolysis. Hardaway, of St. Louis, and Brocq, of Paris, have reported successful cases of keloid so treated. The disfiguring scars sometimes remaining after strumous and syphilitic ulcerations, or after vaccinations, can be much improved by the intelligent use of this method.

When large growths are operated upon, it is frequently advisable to use a needle electrode connected with each pole of the battery and to plunge both needles into the tumor. In this way the resistance to the current is very much diminished and the result is more rapidly obtained. Care must be taken, however, to limit the electrolytic action to the pathological tissue, unless the growth is malignant, when a portion of the normal tissue should also be destroyed to prevent recurrence.

3. ABSORPTION OF LARGER NEW FORMATIONS BY ELECTROLYSIS.

The want of success with the usual methods of treatment of goitre should make any addition to our therapeutical resources against this disease desirable. The number of cases

on record, which are reported to have been cured by electrolysis, is about sixty. Chvostek, Althaus, Gherini and Amory have reported successful cases. In two cases in which I employed the method, great improvement was obtained. One of these was a girl of fourteen, in whom the tumor produced interference with respiration, on account of its size. The application of a current through the tumor, without puncture, resulted in diminishing the circumference of the neck one inch, after twelve sittings. The relief to the breathing was so decided by this time that the patient discontinued her visits and the treatment was suspended. After an interval of ten months, there has been no recurrence of the troublesome symptoms, although the thyroid is still much enlarged. Amory treats goitre by puncturing the gland with the needle used as the negative electrode, while the positive is placed on an indifferent point. Chvostek's method was that used by me in the case above referred to. The ordinary sponge electrodes are placed upon the skin, on each side of the tumor, and a current passed, varying the position of the electrodes and the direction of the current frequently. A sitting should last from ten to fifteen minutes.

Fibroid tumors of the uterus have recently been successfully treated by electrolysis. A French gynecologist, Apostoli, has been especially active in developing the method and bringing its merits before the profession. Within the last year a large number of communications have been made by practitioners of eminence, among whom Keith, Munde and Engelmann may be especially mentioned. I have personal knowledge of a number of cases in which the method has been successfully used. The instruments needed are an insulated needle electrode, connected with the negative pole

(Fig. 2), and a large flat mass of moistened clay (Fig. 3), to be used as the positive electrode. This is thoroughly softened and then placed upon the abdomen, pressing it well down upon the skin so as to insure perfect contact and reduce the resistance to the current as much as possible. Where the current is diffused over a large surface of skin, as by the use of this electrode, very high currents can be employed. From fifty to two hundred milliamperes are frequently used in the treatment of uterine tumors by this method. The needle, connected as negative electrode, is plunged through the abdominal wall into the tumor and the circuit is then completed. The pain from the puncture can be prevented by a preceding hypodermic injection of cocaine. If the puncture has been made under antiseptic precautions, there is little fear of peritonitis. The uninsulated portion of the needle should be completely buried in the tumor. The current may be allowed to pass for ten minutes, when the circuit is broken, the needle withdrawn and the clay electrode removed. Should pain or fever follow, an ice-bag to the abdomen will soon relieve these symptoms.

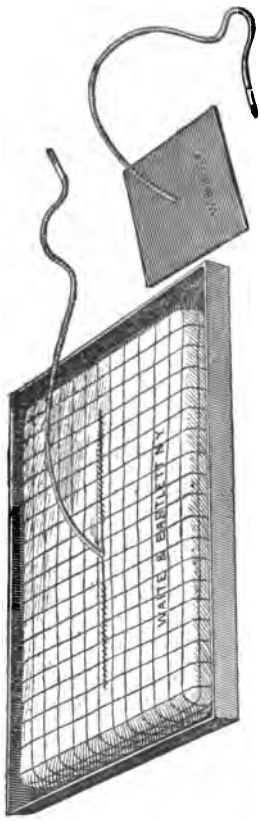


FIG. 3.—APOSTOLI'S ABDOMINAL ELECTRODES.

FIG. 2.—APOSTOLI'S ELECTRODE.

Usually some diminution in the growth of the abdomen is manifest in a few days. The operation may be repeated at weekly intervals until absorption has taken place.

In cases where hemorrhage is the most pronounced symptom of the growth, or in non-puerperal hemorrhage from any cause, a different method is pursued. Here an insulated sound (Fig. 4) is used as the positive electrode, and introduced into the uterine cavity, while the clay electrode, above described, is used on the abdomen as a negative electrode.

FIG. 5.—INSULATED ELECTRODE FOR VAGINA.

Pelvic exudations can also be made to disappear under the influence of the electrolytic current. The exudation may either be punctured through the vagina by a needle used as negative electrode, or a vaginal electrode (Fig. 5) may be placed against the tumor and a large electrode of clay or of wire gauze, covered with absorbent cotton, over the abdomen. In the latter case, the direction of the current may be varied during the sitting, so as to send it in both directions.

FIG. 4.—INTRA-UTERINE ELECTRODE.

4. STRICTURE.

The demonstration of the disruptive effect of the electrolytic current upon organic tissues led several surgeons to employ it for the removal of strictures, due to inflammatory new formations. Mallez and Tripier first reported successful cases, and within the past four or five years many observations have been placed upon record which leave no room for doubt that the practice gives successful results. Dr. Robert Newman, of New York, has been the most prominent advocate of the method. My own experience has convinced me that in elec-

trolysis properly performed we have a method by which urethral stricture can be easily, painlessly and permanently cured. That all strictures of the urethra will be cured by this treatment is not claimed. It would be as irrational to subject all strictures to the electrolytic treatment as it would be to claim external urethrotomy as the exclusive remedy. Many strictures will be dilated, cut from within or without, in the future as in the past, but the treatment by electrolysis has won for itself a place in genito-urinary surgery which it will maintain. The evidence in its favor is too strong to be ignored. Ridicule, indifference, or denunciation from those who have failed to give the method a fair trial, will be alike ineffective in causing its abandonment.

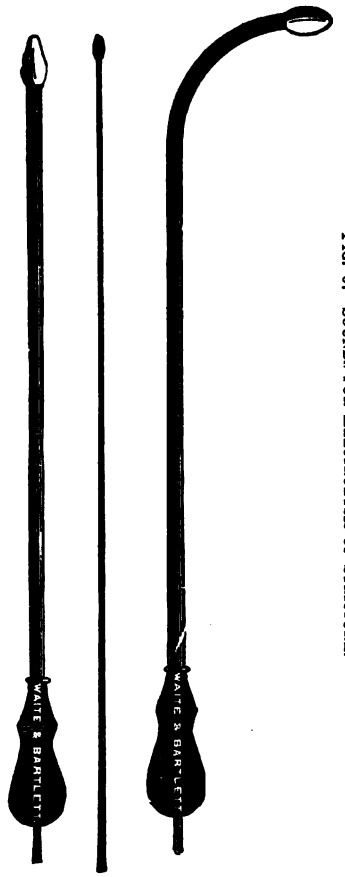


FIG. 6.—SOUNDS FOR ELECTROLYSIS OF STRICTURE.

In stricture of the urethra insulated sounds made to correspond in size to one of the three metrical systems used by genito-urinary surgeons are used as the negative electrode. The illustration (Fig. 6) shows several examples of these sounds. The ordinary sponge-covered reophore is usually used as the positive electrode.

The method of performing the operation is first to measure the stricture with the urethra-meter of Gross, or Otis, or

by the olive-pointed sounds. An insulated sound, two or three sizes larger than the stricture will admit, is then attached to the negative conducting cord of the battery and passed into the urethra until the stricture is reached. With the sponge electrode on the thigh or abdomen, a current of from four to eight milliamperes is passed through the circuit. It will be found that in a few minutes the sound will slip through the stricture without any effort on the part of the operator. In fact, the gentlest pressure only should be used in passing the stricture. I have seen the mere weight of the sound sufficient to overcome the obstruction after the passage of the current had continued for a short time. After the stricture is overcome (the size of the sound having been carefully noted), the patient is allowed an interval of several days, from five to eight being sufficient, before the second sitting. Then a sound two or three sizes larger than that first used should be passed through the obstruction in a similar manner. During the interval the urethra should not be irritated by the constant passage of sounds, or measuring apparatus, "to see whether the operation has accomplished anything." Common sense and good judgment are as necessary in the employment of electrolysis as in the handling of any other therapeutic resource. So far as my personal observation extends, strictures in the anterior portion of the urethra, where the obstruction can be exactly localized, and where the element of spasm can be largely excluded, offer the best cases for this method of treatment and the most satisfactory results. I have treated, however, a number of strictures in the post-penile portion of the urethra, where the results were all that could be expected or desired.

The treatment of stricture of the rectum by gradual dilatation or linear proctotomy is notoriously unsatisfactory. All surgeons admit the inefficiency of the first method and the

danger of the second. In electrolysis we have here a safe and apparently efficient method of treatment. I cannot refrain from citing here a case which came under my notice some time ago. The patient was a married woman, twenty-six years of age, who had contracted syphilis in her sixteenth year. This infection left a reminder in a stricture of the rectum, which, after ineffectual attempts at dilatation by means of bougies, was cut posteriorly by a surgeon of skill and experience. Subsequent dilatation with bougies kept the channel open for a time, but the pain and inconvenience of this treatment caused its neglect and final abandonment. After the death of the surgeon who had performed the proctotomy, the patient came into my hands. Upon consultation with my friend, Dr. S. T. Earle, electrolysis was tried, at my suggestion, the treatment being thoroughly carried out by Dr. Earle. At the first examination a dense stricture was found, through which nothing larger than a fine silver probe could be carried. Only liquid stools could be passed with great pain and straining. A rectal injection was out of the question, as the smallest nozzle of the syringe would not go through the strictured portion of the bowel. The patient had almost given up all hope of recovery, and resolutely rejected a repetition of the operation of proctotomy, which was suggested to her by both Dr. Earle and myself before the idea of trying electrolysis had occurred to me. After three months treatment by electrolysis, an electrode two and a half inches in circumference could be introduced beyond the stricture without giving pain; the patient had normal stools and was very much improved in general condition. *No constitutional or local anti-syphilitic treatment* was given during this time, in order to avoid any fallacious conclusions as to the value of the electrolysis. But it is well known how utterly useless specific treatment is in old syphilitic stricture of the rectum. Even, therefore, if anti-

syphilitic treatment had been given in this case, the conclusion that the electrolysis is a success would not be invalidated.

The method of operating in this malady is somewhat similar to that in urethral stricture. An insulated rectal electrode (Fig. 7) is made to engage in the stricture, and the circuit closed by placing the positive electrode over the sacrum, abdomen or thigh, or, in the case of a female, in the vagina. In the case above cited a large mass of inflammatory (?) infiltration, situated in the recto-vaginal septum, above the stricture, also disappeared under the influence of the electric current.

FIG. 7.—RECTAL ELECTRODE.

Stenosis of the cervix uteri, which has given rise to so much discussion between the advocates of metrotomy and dilatation, can be more easily, and probably more effectively treated by electrolysis. I have no personal experience with the method in this common affection, but several professional friends, devoted especially to gynecological practice, speak highly of its efficiency. Engelmann has also placed on record his successful experience with the method.

It seems to me that electrolysis has a future of great usefulness in the treatment of strictures of the nasal duct and stenosis of the eustachian tube. An early resort to electrolysis in the latter affection would, in my opinion, very much reduce the large number of cases of incurable deafness. Of course, the cases should be carefully selected, in order not to bring the method into disrepute. When hypertrophy, or sclerosis of the lining membrane of the tympanic cavity, and the consequent inter-

IS THE GERM THEORY OF DISEASE RATIONAL?

BY J. S. TODD, M. D., ATLANTA, GA., PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS IN THE ATLANTA MEDICAL COLLEGE; PRESIDENT OF THE ASSOCIATION, ETC.

Dr. A. L. Loomis, in his address before the New York Medical Society, says: "The only diseases in which a bacterial origin has been completely demonstrated *in man* (italics mine) are erysipelas, splenic and relapsing fever." "The proof," says he also, "that the tubercle bacillus is the cause of tuberculosis requires yet the crucial test of human inoculation." It is a well-known fact that some of the lower animals are not affected in the same manner by medicines as man, and also that they enjoy immunity from certain diseases that affect the latter; for instance, the monkey cannot be given syphilis by inoculation. This, it seems to me, is a fair test, if it be demonstrated that there was a reproduction—multiplication—of the inoculated germs taken from man and injected into the inferior animal, causing the animal to suffer with the disease which the human being who furnished the germ had. There is no need for the crucial test in tuberculosis, for almost all the lower animals are subject to tuberculosis. But the admission by so distinguished a physician as Dr. Loomis, that it has been demonstrated that germs are the cause of any disease, is a hopeful and encouraging sign. Dr. Loomis is nearly sixty; men over forty rarely change their opinions, or even take the trouble to investigate new theories. The late Dr. Flint, however, was an enthusiastic advocate of bacteriology; and he,

by almost universal consent, was regarded as the first of American physicians. Dr. DaCosta, a little Dr. Loomis' junior in years, says in his "Diagnosis" (last edition), a book that has made his name famous around the globe, and that is read in many tongues, after giving a cautious but general assent to the bacillus tuberculi being present in tuberculous sputum, "not finding them is not as conclusive evidence as finding them, for Koch failed to detect them in a certain number of cases of consumption." The acceptance of Dr. W. F. Westmoreland, Sr., of antisepsis in the practice of surgery gives another proof of his right to the proud title of Georgia's greatest surgeon. Always a searcher after truth, seeing the truth, he was not ashamed to put it in actual practice, if it did conflict with his earlier views. Thank God for these rare old dogs that can be taught new tricks. I endorse the following from Dr. Weir, of New York: "Nor is cleanliness the whole matter, for, if you trust to that alone, the merest tyro in surgery, who uses antiseptics, will far outstrip you in his recoveries."

It is claimed that specific microbes have been found in the diseases mentioned below: Erysipelas, tuberculosis, smallpox, syphilis, measles, diphtheria, scarlet, splenic, malarial, relapsing, typhus, typhoid and yellow fevers, cholera, pneumonia, pyemia, leprosy, acute rheumatism, ulcerative endocarditis, pyelitis, gonorrhœa, atrophy of the liver, and numerous skin diseases, such as sychosis, etc. Now it has not been demonstrated that such is the fact—that is, that specific germs are the cause of each and every one of the diseases above mentioned, but it is only claimed that such is the case, and I distinctly disclaim my belief of their presence in all the diseases named.

I do believe, however, that all contagious or infectious maladies are caused by germs. I am no microscopist, but make

the above assertion because of the following reasons: Take syphilis or small-pox for example; the minutest quantity conceivable inoculated of either of the viruses will reproduce their kind. A portion imponderable, so to speak, floating in the atmosphere, and wafted for a considerable distance, of small-pox virus causes variola in those susceptible. Now they are not poisons, for poisons are inorganic substances that enter into new combinations with the tissues, and act toxically only when given in excessive doses; they are practically destroyed in destroying; they do not reproduce their kind; for instance, if a man was killed by a dose of two grains of arsenic, another man, to be poisoned by the same arsenic, would not only have to turn cannibal, but would have to eat all parts of the man so poisoned at one meal, and even then the new combinations that arsenic would form with the iron, albumen, etc., in the poisoned individual's blood and tissues would, in all probability, have rendered the arsenic inert; yet, from an almost inconceivably small dose of syphilitic or vaccine virus you get a quantity sufficient to reproduce them in thousands.

Again: a man once poisoned with a drug it does not give him immunity from its toxic effect in future; as a rule, on the contrary, those who have suffered from contagious diseases enjoy immunity afterward; the pabulum upon which the germs feed has been exhausted. Variolus or syphilitic virus, kept for a length of time, be the precautions taken what they may to preserve them, lose their power of infecting.

Arsenic and other mineral poisons, gotten from the deepest strata of the oldest rocks and preserved from the remotest time, do not lose their power to destroy. The one was a vital something that, obeying the laws of nature, lived out its allotted time and died; the other, never having had life, could not die.

Vaccine virus—a crust of it—immersed for a short time in a solution of corrosive sublimate, one part to the 1,000, loses its power of communicability; the living something in it is killed by even the minute quantity of this great germicide. In the treatment of small-pox, pitting is best avoided (and this has been known for ages) by the local application of mercurial ointment.

Now what is the philosophy of this action, what its *modus operandi?* The fumes of mercury destroy the life in seeds; they do not germinate; the ovum of the egg even is killed by it. (Stille says: "It checks the development of the small-pox pustules and thereby tends to prevent the pitting.") How? Not by any local antiphlogistic, astringent or sedative effect surely, for it causes irritation when long applied. No other rational explanation can be offered, it appears to me, than this: Each pustule is a local foci for a number of germs; mercury kills them before they fully develop; it eliminates the cause which leads to the local destruction of skin tissue. Its use is, of course, limited to the face, for if applied to the entire cuticle there would be danger of salivation, and its application to the mucous membranes that are affected in this disease would be impracticable, or, if possible, fatal. The highly inflamed condition of the skin so impairs its power of absorption that salivation is not feared, and with a limited application to the face no ill result has occurred.

Mercury is the best known remedy in syphilis—is almost a specific. No explanation of its antidotal power is so simple as its germidal. The assertion that a sufficient quantity of corrosive sublimate to kill the syphilitic corpuscle or germ would prove fatal to the individual is capable of qualification. The germ has not yet been demonstrated—isolated—although I believe it does exist. Still we do not know that such is the case—that it would thrive or live in so minute a quantity of

corrosive sublimate as is necessary for the cure of the disease in question. But granting, for the sake of argument, the truth of the assertion, that by no means leads inevitably to the conclusion that the antidotal theory is to be abandoned. Fish live for a length of time in polluted streams; they will feebly reproduce for a short while, but inevitably, the pollution continuing, they die. The effect of mountain air in giving back the blush to beauty's cheek is not immediate; the unwholesome atmosphere of a dungeon does not prostrate at once; men live for months surrounded by marsh miasma, in perfect health. Heat and moisture are necessary to develop malarial diseases. Numbers of physicians claim to have discovered the specific cause of malaria. I am not prepared to say it has been demonstrated, but that it exists I believe, and that quinine is the antidote I am equally sure.

Several independent, thoroughly trained workers in different quarters of the globe, using in their researches the lenses of the best opticians, have arrived at the following conclusions: In the blood of malarial subjects an organism is invariably found which is absent in all other conditions. 2d. With the improvement in the condition of the patient the parasite disappears or remains in but one of its protoplasmic forms—the pigmented crest. 3d. Quinine, the universal specific for malarial poisons, is fatal to this parasite, so much so that it is a *sine qua non* that in the search for the organism the patient shall not have recently taken the drug. Prof. Councilman, of the Johns Hopkins University of Baltimore, confirms the above conclusions in a recent lecture before the Pathological Society of Philadelphia. Prof. Osler, of the University of Pennsylvania, in a spirit of scientific incredulity, began experiments to disprove Councilman's conclusions, which resulted in his conversion to the views of the latter.

We are often asked the question by the older physicians,

"How about some diseased germs reproducing with such marvelous rapidity (inconceivable multiplication, say they, with a sneer), while others, as tubercle bacilli, for instance, have been twenty-five, thirty, and fifty years in developing? In answer to the above question, the following quotation from Brunton's Therapeutics is so appropriate, and so fully and completely expresses my views, that I beg no pardon for its length:

"PROBABLE MODE OF ACTION OF ARSENIC IN PHTHISIS."

"The treatment of phthisis is so important that it may be advisable to discuss in a few words the probable mode of action of arsenic and hypophosphites in its early stages. It is now probable that this disease depends on the presence of a bacillus (B. tuberculosis, p. 90).

"In order that it should grow within the body, however, it is necessary that a suitable nidus should be present, and the different susceptibility to the disease of different individuals, or of the same individual at different times, probably depends on their liability to present a suitable nidus. The bacillus tuberculosis differs from such bacilli as the B. anthracis in being of very slow growth, so that when it is cultivated artificially on a solid medium it takes about ten days before it succeeds in establishing itself and begins to grow. Consequently, when applied to an open wound, or when inhaled into the lungs of a healthy person, it does not, like the bacillus anthracis, at once begin to multiply and produce disease in the organism, but it is usually removed by washing, in the case of a wound, or by expectoration in healthy persons. But if its removal be interfered with, it will produce the disease. Thus, if, instead of being applied to an open wound, it be injected under the skin, so that it cannot be removed by washing, it will, after a time, begin to grow, and produce tuberculosis, first local and then general. It is probable that

the case is similar in the lungs. In the healthy lung it finds no nidus, and is removed by expectoration; but if a portion of the lung be consolidated by catarrhal pneumonia, the consolidated part probably affords a nidus to the bacillus, and the longer the consolidation lasts the greater the risk of bacilli finding entrance. In croupous pneumonia, the exudation into the alveoli, consisting chiefly of fibrin, with a few leucocytes, quickly breaks up and is absorbed, so that it is comparatively rarely followed by phthisis. But the proliferated epithelial cells, which fill the alveoli of the lung in catarrhal pneumonia, are much more resistant; they break down and are absorbed much more slowly, and hence a much longer time is given during which bacilli may find a nidus. The marked hereditary nature of phthisis is a curious point in a disease which we suppose to depend on the presence of a bacillus, and is a character in which it differs from such diseases as anthrax, ague, or relapsing fever, which are also due to foreign organisms. But the difference probably depends on the slow growth of the tubercle bacillus, which renders a prolonged undisturbed rest at the point where it enters the body necessary for its further growth. *The disease is not hereditary, but the predisposition* to such morbid changes in the lungs as affords a nidus to the bacilli *is hereditary.*"

My preceptor, Dr. A. W. Griggs, taught me, twenty years ago, that consumption was not hereditary.

Again, we are often asked, "How is it that if water contains germs which occasion, and only occasion, typhoid fever, is it that in mountain districts we often find it in localities widely separated, where there are no sewers, sewer-gas or sewerage that can make pollution?" The question takes many things for granted. We simply answer, explain this fact. Simultaneously, in almost all the middle portion of Georgia, there sprung up, as if by magic, over the face of the

earth, pigeon-clover. We scientific men will not say it was a spontaneous generation. Each bunch had a progenitor exactly like it. The negroes say Sherman brought it with him. Well, if he did, he did not intend to, I am sure. Ruin, fire, famine and desolation marked his vandal path. A sower of salt, not seed, was he. If clover-seed, which is not microscopic, is thus wafted by the winds, why not germs; and what hinders their falling into wells, branches, springs, etc.?

"Marquelle," says Dr. Weir, "has found that the ordinary atmosphere of a large city contains over two thousand bacteria per cubic yard, while the air of a room in an old house in Winter will show bacteria to the amount of forty-five thousand per cubic yard; and again, that the walls of a long-used hospital will hold as many as ninety-thousand in the same space."

With the crucial test of clinical demonstration staring any one who will look in the face, no man, having any regard for his veracity, can doubt the practical good results that have accrued to surgery from the use of antiseptics. Dissertations to prove that antisepsis is only cleanliness; that it is useless or unnecessary at this late day reminds me of the learned (?) English philosopher who wrote a volume to prove that steam could never be applied to locomotion. The first edition of that book was brought to this country in a vessel propelled by steam.

The reduction in the number of infectious diseases that so closely and invariably follow the improvements in the water supply of our large cities is an argument, and a practical demonstration of the fact, that something was excluded which was deleterious.

To say that epidemic and so many other diseases are caused by cold, telluric, or atmospheric influences, (words which cloak our ignorance and savor of superstition,) are terms

which are being restricted before the positive, demonstrable, living presence of germs as etiological factors. The immunity from cholera, which was enjoyed by all save one of the German physicians while visiting India to investigate this disease, carries with it a lesson. They searched for it where it was most prevalent, literally lived in its atmosphere, walked among its victims, handled them, touched it, felt them, investigated it with an intimacy which made contagion the most possible; yet the only precaution they took was the drinking of boiled water. But one of their number had the disease, and he attributed it to drinking water that was not boiled. It appears to me that the heat destroyed a living something—bacillus, microbe, or whatever you may choose to call it—that is the cause of the disease.

Now let us see about the best recognized treatment for a number of diseases. Fresh air, freedom from germs, or germs largely diluted, cleanliness in person and surroundings—in other words, depriving bacteria of a nidus—and pure water, (impure being the source of many, very many diseases.)

Now for drugs. Nine-tenths of all the useful and generally used ones are germicidal, more or less. Take the treatment of diptheria, for instance: Tincture of iron, quinine, alcohol, mercury, sulphur, hyposulphites, turpentine, hydrate of chloral. Each one of these medicines has its advocates. Which one is not germicidal? Every one of them would preserve tissues—prevent putrefaction. How many diseases do we treat without using mercury, alcohol, or cinchona, at some time during their course? Give me three better antiseptics and I will agree that the germicidal theory is not rational.

Opium has never been proven to be germicidal, nor, indeed, am I aware that it is supposed to be so; but I predict, when we know more of the life, habits, etc., of microbes, that it will be found that this drug paralyzes or

stupifies them, thus permitting, and helping, ever conservative nature, to throw them off.

Results seem to show that Dr. Friere, of Rio Janerio, has isolated the yellow fever germ. Of 6,524 persons inoculated by him in Rio during 1885 and 1886, eight (8) died from yellow fever. During the same period, one thousand six hundred and sixty-seven (1,667) unvaccinated persons died. A large majority of the vaccinated persons were foreigners, unacclimated persons, most subject to the disease. The facts are so suggestive that comment is superflous. Is his fate to be that of Jenner?

Diogenese, the Greek philosopher, said all men had two sets of reasons for their action: "One were the reasons which they gave; the other were the reasons they did not give." Now, the reasons which are given in opposition to antiseptics are more theoretical, in my opinion, than the germ theory. The reasons which they do not give—which they keep to themselves—are, first, they do not wish to believe; and, second, they will not take the trouble to investigate.

What good has resulted to the practice of medicine from the germ theory? is often asked. As yet, practically little, so far as treatment is concerned; but the future will bring forth. Small-pox is the first in a long list of preventable diseases that science will practically banish. An ounce of preventive is better than a pound of cure. Knowing the true cause will enable us to prevent effect.

NECROLOGY.

REPORT OF COMMITTEE ON NECROLOGY.

MR. PRESIDENT—In the midst of the active duties devolving upon this Association, at each returning annual session, it has been our custom for a number of years to pause and pay a proper tribute to the memory of our lamented dead. For this purpose, the Association has wisely appointed, among its standing committees, one on Necrology. It therefore becomes the sad duty of your committee to report the loss of several of our most valuable members during this associational year.

Death does not respect one's age, standing, or usefulness. His cruel scythe has been thrust into our ranks, and the young, the middle aged and the old, alike, have been cut down, and garnered, we trust, into the everlasting city of rest. One of our oldest members, who has borne the heat and burden of sixty long years of active life in the profession, and whose gray hairs have honored and adorned our ranks for thirty years, has gone to his long home.

The sturdy middle aged men, at the full meridian of life's active warfare, have had to respond to the roll call of a higher convocation than ours.

Young men in the prime and vivacity of their young manhood, "with glittering prospects along the extended plain," to allure them onward and upward, have been halted on their early professional pathway, and summoned to the Great Association in the far off beyond. Among these young men, whose loss the Association is called to mourn, is that of our able and efficient Secretary; his place we all feel will be hard to fill. But, as we hope to be able to present individual tributes to the memory of each of these departed friends, we

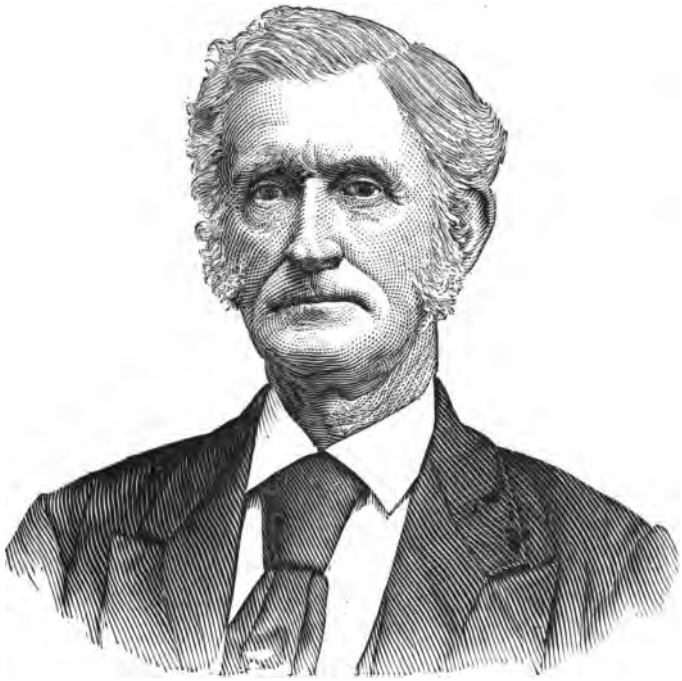
defer to mention in this our general report. The names of those who have died during the year, so far as we have been able to ascertain them, are as follows:

Drs. D. W. Hammond, Macon, Ga.; T. F. Walker, Cochran, Ga.; V. H. Taliaferro, Atlanta, Ga.; James A. Gray, Atlanta, Ga.; L. E. Borcheim, Atlanta, Ga.; J. J. Waring, Savannah, Ga.

While we deem it unnecessary to present any long formal preamble and resolutions, as we herewith submit individual tributes, yet we desire that the Association, in adopting this report, should express, as we know they feel, that, in the death of these gentlemen, the profession at large, and the Association especially, has lost some of its brightest and most useful members; and that we hereby extend to their families our warmest and sincerest sympathy, and assure them that their loss is our loss, and that we, too, feel very keenly the sad bereavement which afflicts them and us alike.

Respectfully submitted,

K. P. MOORE, *Chairman.*



DR. DUDLEY W. HAMMOND.

BY K. P. MOORE, M. D., MACON, GA.

The subject of this notice, of English and Scotch ancestry, was born in South Carolina, May 12th, 1809. He studied medicine with Dr. Henry Freeman, of Carnesville, Franklin county, Georgia, and Dr. Banks, of Elbert county. His first course of lectures was taken at Charleston, South Carolina, during the session of 1827–28; and in 1850 he graduated M. D. at the Georgia Medical College, of Augusta. He com-

menced the practice at Ruckersville, but after a few years removed to Culloden, in Monroe county, where for twenty-one years he enjoyed a large and lucrative practice. He soon won the confidence of the people, and not only did a large practice in his immediate community, but was sent for in consultation in all the surrounding counties. Possessed, as Dr. Hammond was, of a commendable ambition and laudable aspirations, he naturally felt that the circumscribed inland town of Culloden did not afford to him an ample field for usefulness and professional growth; the breadth of his order of talents should not be hid away in an obscure inland country work; and hence Dr. Hammond grew restive, and began to look around for larger fields. After visiting several places, the young city of Macon presented to his mind the inviting field; hence he determined to make it his future home, and, accordingly, in 1853, he removed to Macon and adopted it as his permanent home. He became associated in business with the late Dr. Boon, and was in copartnership with him for a good many years. It was but a short while before Dr. Hammond had arisen to the front rank in his new field, and no man ever lived in Macon who more completely held the universal confidence and esteem of its citizens than he did. Both with his professional confreres and with the laity, Dr. Hammond was a great favorite and friend. As a general practitioner he had few equals, but his inclinations led him also to surgery, and in this field he ranked far above the average of his day. He was a man of broad views and firm convictions, and once satisfied of the utility of any operation, he did not hesitate for a moment to perform it. And while he was a conservative man, and reasoned well upon every case presented, yet he was, with it all, a bold and fearless operator; and his success was rather phenomenal for his day. Although he operated before the days of Listerism,

when surgeons battled against the universal vile influence of germs and its concomitant septic poisons, yet his record in many of the capital operations compare favorably with any modern surgery. He did, under the old regime, twenty-three lithotomy operations, and never an untoward symptom.

As a man and citizen Dr. Hammond was held in high esteem. He was married, in 1833, to Miss M. E. Speer, daughter of the Hon. Alexander Speer, ex-Comptroller-General of the State of South Carolina. Being well-connected, and a woman of fine native intellect, she was well calculated to be of valuable service to her husband in the battles of life. Dr. Hammond possessed a well-balanced mind, and his courtly manners, his firm, sterling qualities, and high-toned professional bearing, gave him no ordinary prominence in the hearts of his professional acquaintances; hence he was selected, in 1876, as a representative from the Georgia Medical Association to the International Medical Congress, at Philadelphia, and worthily represented our State at that meeting. When the experiment of a State board of health was made, some years ago, for Georgia, he was selected by Governor Smith as worthy the honor of Representing the Fifth Congressional District on that board. But his modest nature caused him to shrink from so responsible and conspicuous a position, and it was his pleasure to name the lamented Dr. Nottingham as one worthy and well qualified to assume so important a trust.

For sixty long years Dr. Hammond adorned his profession by a well-ordered, quiet, unostentatious life, and in this has set for us an example well worthy our imitation. And in other respects, the life of the Doctor should be to us an inspiring example. He was open and unselfish, and was glad to impart to his professional brethren whatever his careful observation and long experience had taught him to be useful,

hence, in the prime and meridian of his life, he was a constant contributor to the current medical literature.

It was the pleasure of the writer to be associated in the practice with Dr. Hammond during the last three years of his life, and it is my pleasure to bear personal testimony to his real worth, and honorable, high-toned character. I knew his inner life, and know full well the loss sustained by our profession in the death of this venerable old gentleman.

He joined this Association in 1857, and was for thirty years an active member.

No man was ever more devoted to his profession, and it might almost be literally said of him that he "died in harness." Almost up to the date of his death he was daily visiting the sick and dispensing cheering words.

On the morning of the 4th of July, 1887, he quietly fell asleep, and was gathered to his fathers. Peace to his ashes.

JAMES A. GRAY, M. D.

BY J. S. TODD, M. D., ATLANTA, GA.

"There is no death. The stars go down
To rise upon some fairer shore,
Where, bright in heaven's jewelled crown,
They shine forever more."

James A. Gray was born December 29th, 1849, in Monroe county, Georgia. He passed over the river the 27th day of September, 1887. He was, therefore, nearly thirty-eight years of age.

His literary education was received in the country school near his home.

At the age of twenty-seven he began the study of medicine, and graduated in 1879, with the first honor, from the Atlanta Medical College.

He connected himself with the Methodist Church in 1866, and, up to the day of his death, was a consistent member and regular communicant.

Immediately after receiving his degree, he began the practice of medicine in Atlanta, and at once made himself felt and known as a man of strength. During the Winter of 1879-80, he conducted a quiz at the Atlanta Medical College, and so ably did he acquit himself, and so personally popular was he with the students, that, upon his acceptance of the demonstrator's place, and lectureship on minor surgery in the Southern Medical College, in 1880, this young doctor of eighteen months carried with him over half the second course students of the old school.

The faculty of his alma mater made haste to secure the invaluable services of her gifted son, and before another session, in 1881, he was her proctor, and occupied the chair of lecturer on venereal diseases and minor surgery. At the time of his death he was still honoring this chair, and had been further raised to the exalted position of Dean of the faculty—Dean of his faculty in seven years after receiving his degree!

He was filling his second term as secretary of this Association, how capably let the five large volumes of its transactions, gotten out by him, be the answer.

He was a member of the Board of Censors in the American Medical Association, surgeon of the Atlanta Rifles, an active, live member of the Atlanta Society of Medicine, and managing editor of the Atlanta Medical and Surgical Journal, a periodical which he rescued from bankruptcy and ruin, and this, too, after many older heads had given up the fight. Dr. Gray left it an ornament to medical literature; a financial success, with a circulation larger than that of any similar journal in the South, and with an advertising patronage equal to any in America.

Dr. Gray, in person, was corpulent, but, in spite of this, and contrary to the usual rule, that indolence and adipose are synonymous, he was possessed of an energy and perseverance only equalled by his honesty of purpose and kindness of heart. I knew him and loved him from the time he entered our ranks. We were as intimate as brothers.

He was in no sense a negative man; he had opinions, and boldly and freely gave expression to them. The last of all men to pick a quarrel (for he was congeniality itself), being in one, he followed the advice of Polonius to Laertes—"Bear't that the opposed may beware of thee."

One of the best of anatomists, he naturally leaned toward surgery. I often complimented him upon his thorough acquaintance with the human form divine. He would say, "Yes, I ought to know something of it, for, from the first day I began the study of medicine, until now, not one has passed that I have not given the subject study. I read Gray's Anatomy four or five times every year." He read Gray's Anatomy four or five times every year! What an example for the living! No wonder that he builded so firmly, for the doctor whose medical education is grounded on anatomy stands on a rock foundation, and will stand when the winds come and the floods descend. But how did he find the time to do this, with so many other cares? And we know that he had, besides, a large lucrative practice to look after. The answer is—he was sober. For twelve years preceding his untimely end, he had tasted nothing alcoholic. He was systematic. If order be heaven's first law, that law was glorified in him. He worked as he talked—straight to the mark. His faculty for organization and system was a prominent feature in his character.

"He, while others slept,
Toiled upward in the night."

He was a man marked in many ways. Determination was written on his face. Let him but know, after carefully considering and weighing, that he was right, then he considered obstacles only to brush them away. In touching upon the delicate subject to which I am about to allude, I do so after having asked myself the question, "Would he approve it?" Before he began the study of medicine, he, for some time, drank to excess. The total abstinence which he practiced for twelve years is a monument to his fidelity and will, and his victory is mentioned to elicit emulation from those who consider themselves the slaves of habit.

He was no bigot; he did not object to others taking a social glass, but said, for himself, "I have determined never to allow another drop to pass my lips unless prescribed by a physician. I have never wavered from my purpose even so far as to consider whether I wanted a drink or not." Had he lived three-score years and ten, I am sure he would have gone to his grave with the vow unbroken.

His early education was so defective and limited that even his speech betrayed him. How well do I remember his indignation when he heard that it had been said, by a member of this body, that he was incapable of bringing out the transactions. "If I never learn to speak correctly, I will write good English, and he shall confess it," said he, with an emphasis peculiarly his own.

Freedom from grammatical error and clearness of statement were marked peculiarities of all his productions, and he was a voluminous writer.

As a teacher, he was, in every way, a success. The secret of his excellence as a lecturer was—First, his thorough familiarity with his subject; secondly, he was pithy, pointed, practical, truthful, earnest, thoroughly in love with his theme, enthusiastic, believing what he taught. While he was not

eloquent, his thirst for knowledge and honest endeavor to know the truth was contagious, and drew the students to him with bonds of love and admiration.

When James A. Gray put off his armor, the Atlanta Medical College lost its right arm; its students their best friend and instructor (for, until his death, he was still their quiz-master). I have known him to sit up with a dull student until three o'clock in the morning, preparing and drilling him for the "green room."

When Dr. Gray was no more, the army of medical men in America lost a young captain, whose career, though only just begun, was even then more glorious than that of nine out of ten of the grey-haired leaders.

When this Association is hoary with years, the antiquarian, looking over its archives, will find that no secretary in the long list has done his duty better than the genial, studious, systematic, painstaking Gray.

When his body was slowly and sadly laid to rest in West View Cemetery, the City of Atlanta mourned for one of her most useful citizens.

It was attested by his pastor, who spoke so feelingly over his lifeless form, "that, busy man as he was, he rendered unto God the things which were God's; that his pew in God's house was nearly always filled."

Believing and trusting in God, he calmly

> "Folded the drapery of his couch about him
> And lay down to sweet repose."

When, from among his friends, the icy monster took him, they lost one who was always ready to serve them; who was as purely unselfish as generosity could make him; whose ear was never deaf to the appeals of the poor; whose hands never tired doing charity.

This Association, I know, extends, through me, their heartfelt condolence to his venerable parents, who, when they buried Jim, laid away the last of three noble boys, who all died in the flower of young manhood. One preached His word; the other two, like the Great Exemplar, were good physicians. Judging the tree by its fruits, we are persuaded that James A. Gray is among those to whom has been accorded the glorious welcome, "Well done, good and faithful servant."

To his disconsolate and childless widow, we tender tears of sympathy, and pledge protection and love to her for his sake.

We give him up, oh, sorrowfully! but thank God for his shining example to the youth of our land, so beautifully illustrating what can be accomplished, in even a short life, by industry, suavity, sobriety, laudable ambition, perseverance, morality, and determination.

VALENTINE H. TALIAFERRO, M. D.

BY J. S. TODD, M. D., ATLANTA, GA.

This eminent gynæcologist, although born in Oglethorpe county, Georgia, September 24th, 1831, came of remote Italian ancestry, and in his personal appearance and distinguishing traits of character, he displayed some of the finest qualities of that gifted race.

These ancestors on coming to America, first settled in the vicinity of Williamsburg, Virginia, where they were counted with the wealthy and respectable families of that thriving section of the "Old Dominion."

Mr. Zack Taliaferro, his great-grandfather, who lived in Amherst county, was the father of that gallant and distinguished soldier of the Revolutionary war, Colonel Benjamin Taliaferro, who won an enviable reputation in many hard fought battles, commanding a company under General Washington during the severe campaigns of 1777–'78, in the Jerseys. At the battle of Princetown he forced the surrender of a company of British troops, and ragged and shoeless, as were the American soldiers in that hard struggle, he stepped forward and proudly accepted the surrendered sword of the elegantly uniformed British commander. Later on Colonel Taliaferro joined the Southern army and was captured at the siege of Charleston. Returning to Virginia on parol, he resumed the peaceful occupation he had left to serve his country on the battle field.

About the year 1785, Colonel Taliaferro removed to Georgia, where his brilliant military reputation and sterling character soon made him one of the foremost men of his day in the state. Among other honors conferred upon him, he was elected a member of Congress, President of the Georgia Senate, a Judge of the Superior Court (although not a lawyer), and Trustee of the State University, in all of which positions he won added reputation as a patriot and statesman. Taliaferro county, the home of the lamented Alexander Hamilton Stephens, will perpetuate his memory far into the distant future. Colonel Taliaferro's son, Warren, who located on Broad River, in Oglethorpe county, married a sister of Governor George R. Gilmer, of this State, and their only son, Col. Chas. B. Taliaferro (lately deceased at Columbus) was the honored father of the subject of this sketch. After giving his son the best educational advantages that home institutions offered, he sent him to the University of New York, located in that city, from the medical department of which he graduated in 1852.

Coming back to Georgia, Dr. Taliaferro was united in marrriage to Miss Mary A., daughter of Dr. B. O. Jones, of Atlanta, with whom he had studied medicine, and after practicing his profession in Palmetto, Atlanta and Columbus, he finally returned to Atlanta, where he was living when he died. His advancement in honors and reputation were steady and marked. In his early life he edited and published a medical and literary paper. In 1857 he was elected Vice-President of the Medical Association of Georgia; in 1877 he became President of the Atlanta Academy of Medicine; in 1876 he was a member of the International Medical Congress, held at Philadelphia; in 1859 he was elected Professor of Materia Medica, in the Oglethorpe Medical College at Savannah, which he resigned the following year; in 1872 he was chosen Professor of "Diseases of Women and Children," in the Atlanta Medical

College, and in 1875 was transferred to the Chair of "Obstetrics and Diseases of Women," which position he filled with distinguished ability; in 1876 he was Dean of the Faculty, and a year later was made a Trustee. In addition to this, he was the efficient Secretary and Executive officer of the Georgia State Board of Health, (created in 1875) during its active existence. His last address at the opening exercises of the Atlanta Medical College was a masterpiece in oratory. Being a man of untiring energy and boundless resources, he has been able to respond to the various calls made upon him for such services.

Dr. Taliaferro made many valuable contributions to medical literature, among the more noted we mention "Medication by the Use of Uterine Cloth Tents in Diseases of the Body and Cavity of the Uterus;" "Pathological Sympathies of the Uterus;" "The Corset in its Relation to Uterine Diseases;" "New Intra-Uterine Pessaries;" "The Application of Pressure in the Treatment of Diseases of the Uterus, Ovaries and Peri-Uterine Structures;" "New Vaginal and Intra-Uterine Pessaries."

In the Spring of 1881, Dr. Taliaferro established a private infirmary for the treatment of diseases of women. This infirmary grew steadily until his death, and is still open to patients under the care of his son-in-law, Dr. Noble, a physician of rare attainments.

When the late war commenced Dr. Taliaferro, was residing in Columbus, and was one of the first to respond to the call for volunteers. As a private in the City Light Guards of Columbus, he was brought into the Second Georgia Battalion, (commanded by Colonel Thomas Hardeman, of Macon), and was elected Surgeon. Owing to his inheriting a liberal share of the military spirit of his ancestors, Surgeon Taliaferro soon yearned for a more active position, and resigning from the

battalion he organized, and became Colonel of the Tenth Georgia Cavalry, which he commanded with rare courage and skill, leaving the army at the close of the war with the Brevet rank of Brigadier-General. It was this active service that gave Dr. Taliaferro his fine military bearing, and trained him to quick movements and prompt results. There were few handsomer or more chivalrous soldiers in the Confederate army, and since the war he ever held in kind remembrance the gallant men of that bloody period. His "Memorial Address" at the graves of the dead of the City Light Guards, delivered a few years ago at Columbus, was an eloquent and beautiful tribute to the "Lost Cause" and its "Fallen Braves."

In his domestic relations Dr. Taliaferro was most happily blessed. A devoted wife and four bright handsome children made his home life attractive and joyous. He had one of the handsomest faces, the most beautiful eyes, and lovely hair I ever looked upon.

His practice was large and lucrative. A more perfect gentleman in feeling, manner, thought and action never lived. He was a gentleman by birth, instinct and education. He was an invalid for several years before his death, but continued up to the last actively at work.

I prevailed on him to take a much needed rest, and he concluded to go to Tate Springs. For several days before he left, he was confined to his bed; I found him weak and haggard on the morning of his departure, but he had actually in active preparation all the arrangements to operate on a charity patient for an old and extensive laceration of the perineum. His assistant and I prevailed on him not to attempt the operation. He left for Tate Springs that morning, but carried her and several other patients with him. I am told that just prior to his death, he operated.

His disease was Albuminaria accompanied by valvular heart

trouble. He literally died in the harness. The description by the poet of Abou Ben Adhem applies with peculiar grace to our dead brother:

Abou Ben Adhem (may his tribe increase!)
Awoke one night from a deep dream of peace,
And saw within the moonlight of his room,
Making it rich and like a lily in bloom,
An angel writing in a book of gold,
Exceeding peace had made Ben Adhem bold;
And to the presence in the room he said,
"What writest thou?" The vision raised its head,
And, with a look made of all sweet accord,
Answered, "The names of those who love the Lord."
"And is mine one?" asked Abou. "Nay, not so,"
Replied the angel. Abou spoke more low,
But cheerly still; and said, "I pray thee, then,
Write me as one that loves his fellow-men."
The angel wrote and vanished. The next night
It came again, with a great wakening light,
And showed the names whom love of God had blest;
And, lo! Ben Adhem's name led all the rest.

HENRY WILE, A. B., M. D.

BY VIRGIL O. HARDON.

DR. HENRY WILE was born in Rochester, N. Y., in 1858. He was educated in the public schools of that city. From an early age he manifested the aptitude for study which formed so prominent an element of his character in his maturer years. On this account his parents decided to educate him for a profession, and he entered the University of Rochester, from which institution he graduated at the age of twenty years. He at once commenced the study of medicine in the Medical Department of the University of Pennsylvania, and obtained his diploma in 1882. His inaugural thesis upon "The Pathogenesis of Secondary Tumors" received the alumni prize for that year. After his graduation, he spent about a year and a half in Europe, principally at Vienna, where he gave especial attention to the study of dermatology. On his return he entered upon general practice in the City of Philadelphia, and rapidly acquired a lucrative patronage. He was appointed Clinical Assistant to the chair of Dermatology in the University of Pennsylvania. After practicing with success for about two years, failing health compelled him to seek a change of climate, and in June, 1885, he removed to Atlanta. Within three months after his removal to Georgia he was appointed Lecturer on Dermatology in the Atlanta Medical College, a position which he filled with honor to himself and with benefit to the College until his death. In the early Spring of 1887, finding that the pulmonary affection from which he had long suffered was making rapid progress, he decided to go to Denver, Colorado. Upon arriving in that city he soon ascertained that the climate was not suited to his condition,

and realizing that his end was near, he started to return to the home of his parents in Rochester. He died upon the railroad train before reaching the end of the journey, on the 11th of April, 1887, at the early age of twenty-nine years. Such is the brief record of a life which contained the promise of greater usefullness than falls to the lot of the majority of men.

Dr. Wile was by nature a profound student. He preferred the companionship of books to the companionship of his fellow men. Modest and retiring in his disposition, he was unfitted to contest for the material prizes in the arena of life. The professional success to which he would have undoubtedly attained had his life been spared would have been based upon the solid foundation of intellectual ability rather than upon the adventi tious aids of aggressive self-assertion, social qualifications or accidental associations. Pathology and dermatology were his favorite studies, and in both of these branches of medical science he was truly an expert. At the same time he was well versed in general practice, not only as relates to the elementary principles, but also to the *minutiæ* of treatment and the *technique* of surgical procedure. He was thoroughly familiar with the medical literature of the day, and a good working acquaintance with the French and German languages enabled him to drink from the streams of knowledge at their original sources.

He was a fluent and easy writer, and a frequent contributor to medical journals. At the time of his death he was engaged in the preparation of a systematic treatise on diseases of the skin, a portion of which was published serially in the Atlanta Medical and Surgical Journal. He was invited to contribute to Wood's Reference Hand-book, the article on the Anatomy of the Skin, a work which was interrupted by his untimely death. His writing was characterized by solidity rather than brilliancy, and hence was admirably adapted to the presentation of purely scientific thought. He was conscientious in

his adherence to establish facts, and his theories and generalizations were always founded upon a logical basis. He never sacrificed accuracy or lucidity to rhetorical effect. He impressed the reader more by the value of the ideas presented, than by the manner of their presentation.

As a lecturer his style was clear and forcible, and commanded the attention of his hearers. Although somewhat deficient in conversational powers, in the lecture room his thorough familiarity with his theme more than offset a natural diffidence which might otherwise have interferred with his success in this line of work. He possessed little of the magnetic quality which inspires enthusiasm and provokes applause, but his earnestness of purpose, depth of thought and devotion to his work gave to his teaching a value which was fully recognized and appreciated by his pupils

As a practitioner he was eminently successful and had already acquired a remunerative practice and an enviable reputation. His *clientele* was not confined to his own city, or even his own State, but had already extended to neighboring States, when his death occurred. His counsel was sought in matters pertaining to his specialty by leading members of the profession, while upon mooted points in pathology his *dictum* was accepted as conclusive. His relations to his fellow-practitioners were marked by courtesy, generosity and strict ethical propriety. He observed the spirit as well as the letter of the code. He loved moral rectitude as he loved scientific truth, for its own sake. Hence he was incapable of a dishonorable action. While charitable towards the failings and weaknesses of others, he had a thorough contempt for petty meanness, injustice and deliberate wrong-doing. His sensitive nature abhorred discord and strife, and the last months of his life were embittered by a cruel and unjustifiable legal persecution, which undoubtedly hastened his death.

He made but few intimate friends, but those who were once admitted to the inner circle of his confidence were "grappled to his soul with hooks of steel." Beneath his modest and quiet exterior, so much sweetness of disposition, gentleness of nature, innate refinement and true culture were united with great natural talent and acquired ability, that to know him intimately was to love and admire him. He disliked gaity and the pleasures of society. His intellectual gifts and his musical talents, which were of a high order, would have opened to him the portals of a high social position. But he preferred the seclusion of his study and the companionship of his books. Yet he was an ardent advocate of and an active worker in medical organizations, and was one of the most devoted members of the Atlanta Society of Medicine, holding the position of Vice-President at the time of his death. He was rarely absent from a meeting, and always participated in the discussions with an ability and fluency which won the respect and admiration of his fellow-members. He was also a member of the Medical Association of Georgia, to which body he presented a paper entitled "Notes on Hyperidrosis" at the meeting of 1885.

There are few men of whom it can be said at their death that their places cannot be filled. Yet this is in a great measure true of Dr. Wile. Doubtless there are as good pathologists, as good dermatologists, as good lecturers, as good writers, as active workers and as conscientious men as he, but rarely are all these qualifications found united in one individual. In the death of Dr. Wile, the profession has sustained a loss which is fully appreciated only by those who knew him best. To imitate his virtues, to emulate his example, is the highest tribute we can pay to his memory.

DR. THOMAS FRANCIS WALKER.

Since our last annual meeting, death has invaded our ranks and taken one of our purest and best brothers, Dr. Thomas Francis Walker, who died February 1st, 1888.

Dr. Walker was born at Longstreet, Pulaski County, Georgia, February 26th, 1836. He early developed those traits—generosity, simplicity and purity—of character that endeared him to all who knew him in youth and became prominent and leading characteristics throughout his life. After receiving his literary education at Oxford, Ga., he commenced the study of medicine, and graduated from the Jefferson Medical College of Philadelphia, in the class of 1857-'58. He returned to his native home, and there successfully pursued the practice of medicine until 1862, when he enlisted in the Confederate service, and was elected Surgeon of the 10th Confederate Cavalry, which position he filled with honor and distinction until his health failed. He was then assigned to Hospital Service. Many who survive him will gladly attest his faithfulness to duty and his great sympathy and kindness of heart for suffering humanity, wherever found, or whatever condition in life. Polished and affable, but modest and retiring to a degree, his personal attainments and magnetism made him the centre of atttraction wherever he moved and stamped him the ideal gentleman and physician. This was not less felt by the public than the profession. We who had the privilege of laboring in the same field felt instinctively that we were indeed in the presence of a brother when brought in consultation with him. His was a high and exalted standard of ethics, based upon the grand and noble Golden Text, "Do unto others as you would have them do unto you." He con-

demned in unstinted terms charlatanism, and labored earnestly for the elevation of his profession and the upbuilding of our Association. He was a frequent contributor to the press, and his articles were read with interest and edification. He was of a frail constitution and the arduous duties of an active professional life early showed traces of inroads on his delicate organism; still he labored earnestly and actively, never complaining, never desponding until a few weeks before the end came. While his death was not unexpected it was a great shock to his community, who loved and esteemed him so highly. Much more might be truthfully said of this good man, but it would be more of a local than general interest. While his extreme modesty and unassuming manners circumscribed his field of action, he shone pre-eminently in his sphere and will ever live in the hearts and memories of those who knew him best.

ROLL OF MEMBERS.

ROLL OF MEMBERS

OF THE

Medical Association of Georgia,

1888.

ARRANGED BY CONGRESSIONAL DISTRICTS.

ABBREVIATIONS—P., President; V-P., Vice-President; S., Secretary; C-S., Corresponding Secretary; T., Treasurer; O., Orator; C., Censor—indicating the offices the members hold or have held.

☛ *Members are particularly requested to notify the Secretary promptly on making any changes in their post-offices.*

☛ *The Secretary will esteem it a favor if any member will write him at once on noticing any inaccuracy or omission in the roll.*

FIRST DISTRICT.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Belt, L. J	Sabastopol	Wilkinson	1888
Bleakney, W. F	Eden	Effingham	1888
Burford, H	Brunswick	Glynn	1888
Butts, J. A	Brunswick	Glynn	1888
Charlton, T J	Savannah	Chatham	1887
Colding, C. H	Savannah	Chatham	1882

FIRST DISTRICT.—CONTINUED.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Duncan, Wm. (T.)	Savannah	Chatham	1886
Dunwody, J. A	Brunswick	Glynn	1888
Elliott, W. H	Savannah	Chatham	1881
Harris, R. B	Savannah	Chatham	1885
Houstoun, J. P. S	Savannah	Chatham	1873
Hummel, George C	Savannah	Chatham	1884
Johnson, S. W	Graham	Appling	1888
LeHardy, J. C. (T, V-P., P.)	Savannah	Chatham	1868
Lind, Jr., E. G	Savannah	Chatham	1887
Martin, John D	Savannah	Chatham	1867
Nunn, R. J. (C., V-P., P.)	Savannah	Chatham	1867
Quarterman, K. A	Walthourville	Chatham	1885
Read, J. B	Savannah	Chatham	1851
Sample, C. L	Canoochee	Emanuel	1875
Smith, H. J	Blackshear	Pierce	1887
Stone, George H	Savannah	Chatham	1875
Walker, J. L	Waycross	Ware	1884
Waring, J. J	Savannah	Chatham	1853
Weichelsbaum, J. H	Savannah	Chatham	1884

SECOND DISTRICT.

Alston, N. C	Richland	Stewart	1888
Bruce, W. W	Thomasville	Thomas	1881
Cheatham, W. B	Dawson	Terrell	1880
Dekle, Thomas S	Thomasville	Thomas	1874
Dobbins, W. O	Fort Gaines	Clay	1888
Doster, B. R. (V-P., C.)	Blakely	Early	1873
Hillsman, P. L	Albany	Dougherty	1871
Hopkins, T. S	Thomasville	Thomas	1865
McIntosh, T. M. (V-P.)	Thomasville	Thomas	1874
Strother, Wm. A	Albany	Dougherty	1873
Standifer, W. B	Blakely	Early	1886
Taylor, A. P	Thomasville	Thomas	1873
Thompson, P. H	Bluffton	Clay	1886
Twitty, W. W	Camilla	Mitchell	1871

THIRD DISTRICT.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Brooks, C. A	Americus	Sumter	1888
Coleman, J. T	Perry	Houston	1851
Engram, R. O	Montezuma,	Macon	1884
Fielder, J. F	Eastman	Dodge	1884
Havis, M. W	Perry	Houston	1854
Hawkins, S. B. (V-P., C.)	Americus	Sumter	1871
Herrman, J. D	Eastman	Dodge	1884
Hicks, C	Dublin	Laurens	1884
Hightower, R. H	Dublin	Laurens	1884
Jelks, N. P	Hawkinsville	Pulaski	1882
Joiner, B. L	Andersonville	Sumter	1888
Jordan, F. M	Hawkinsville	Pulaski	1872
Logan, A. J	Americus	Sumter	1882
Richardson, C. H	Montezuma	Macon	1886
Solomon, J. C	Faulk	Houston	1884
Smith, A. A. (V-P.)	Hawkinsville	Pulaski	1875
Smith, J. B	Perry	Houston	1870
Walker, T. D	Cochran	Pulaski	1882

FOURTH DISTRICT.

Bardwell, E. L	Talbotton	Talbot	1872
Beasley, James A	West Point	Troup	1884
Bullard, W. L	Columbus	Muscogee	1882
Cole, J. F	Carrollton	Carroll	1884
Fitts, W. W	Carrollton	Carroll	1872
Griggs, A. W. (O., V P., C.)	West Point	Troup	1866
Griggs, J. W	West Point	Troup	1878
Grimes, George J	Columbus	Muscogee	1872
Ridley, F. M	LaGrange	Troup	1887
Taylor, J. P	Haralson	Coweta	1859

FIFTH DISTRICT.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Alexander, J. F. (P., C., V-P.)	Atlanta	Fulton	1849
Armstrong, W. S.	Atlanta	Fulton	1866
Anthony, E. R. (V-P.)	Griffin	Spalding	1887
Arbeely, F. J	Atlanta	Fulton	1887
Ashworth, A. B. (S.)	Atlanta	Fulton	1887
Avary, Arch	Atlanta	Fulton	1887
Baird, James B. (S., O.)	Atlanta	Fulton	1872
Bennett, J. S.	Atlanta	Fulton	1887
Benson, C. F.	Atlanta	Fulton	1887
Bizzell, W. D. (V-P.)	Atlanta	Fulton	1882
Boring, John M. (V-P.)	Atlanta	Fulton	1856
Calhoun, A. W. (V-P., C., P.)	Atlanta	Fulton	1874
Collier, T. E.	Atlanta	Fulton	1887
Connally, E. L. (C.)	Atlanta	Fulton	1860
Cooper, Hunter P	Atlanta	Fulton	1886
Cortelyou, P. R.	Marietta	Cobb	1887
Crawford, J. M	Atlanta	Fulton	1888
Crichton, L. M	Atlanta	Fulton	1888
Divine, K. C	Atlanta	Fulton	1882
Drewry, T. E	Griffin	Spalding	1888
Duncan, M. C	Atlanta	Fulton	1887
Duncan, J. W	Atlanta	Fulton	1883
Earnest, J. G	Atlanta	Fulton	1882
Elkin, W. S	Atlanta	Fulton	1882
Evans, W. W	Oxford	Newton	1872
Faver, Paul	Fayetteville	Fayette	1873
Gaither, Henry	Oxford	Newton	1851
Gann, Dewell	Bolton	Fulton	1887
Gaston, J. McF	Atlanta	Fulton	1884
Green, C. C	Atlanta	Fulton	1887
Greene, J. H	Decatur	DeKalb	1887
Gwyn, J. P	High Shoals	Walton	1883
Hamilton, J. L	Stone Mountain	DeKalb	1859
Hardon, Virgil O	Atlanta	Fulton	1886
Harris, N. O	Atlanta	Fulton	1887

FIFTH DISTRICT.—CONTINUED.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Hart, C. C	Cross Keys	DeKalb	1888
Hobbs, A. G	Atlanta	Fulton	1882
Howell, D. H	Atlanta	Fulton	1878
Huzza, Harry	Atlanta	Fulton	1887
Janes, J. W	Atlanta	Fulton	1879
Jarnagin, W. C	Atlanta	Fulton	1882
Jones, L. H	Clarkston	DeKalb	1887
Kelley, J. M	Griffin	Spalding	1885
Kendrick, W. S. (o.)	Atlanta	Fulton	1874
Lallerstedt, T. L	Panola	DeKalb	1868
Leyden, W. H	Atlanta	Fulton	1887
Logan, J. P. (P.)	Atlanta	Fulton	1858
Love, T. D	Atlanta	Fulton	1887
Love, Wm. Abram (V-P.)	Atlanta	Fulton	1866
McKown, T. D	Jonesboro	Clayton	1887
McRae, F. W	Atlanta	Fulton	1887
Medlock, J. B	Austell	Douglas	1888
Miller, H. V. M	Atlanta	Fulton	1851
Nicolson, W. P	Atlanta	Fulton	1883
Noble, G. H	Atlanta	Fulton	1883
North, A. G	McDonough	Henry	1887
Olmsted, J. C	Atlanta	Fulton	1886
Parks, W. B	Atlanta	Fulton	1882
Perry, A. C	Covington	Newton	1878
Poole, W. H	Douglasville	Douglas	1883
Powell, T. S. (V-P.)	Atlanta	Fulton	1857
Ridley, R. B	Atlanta	Fulton	1887
Roy, G. G	Atlanta	Fulton	1878
Scott, D. W	McDonough	Henry	1888
Scott, H. F. (o.)	Atlanta	Fulton	1879
Selman, J. L	Douglasville	Douglas	1882
Stephens, L. P	Atlanta	Fulton	1888
Stirling, W. L	Atlanta	Fulton	1878
Taylor, R. H	Griffin	Spalding	1879
Todd, J. S. (o., C., P.)	Atlanta	Fulton	1872

FIFTH DISTRICT.—CONTINUED.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Tye, R. L	McDonough	Henry	1887
VanGoidtsnoven, E	Atlanta	Fulton	1887
Westmoreland, W. F. (P.)	Atlanta	Fulton	1856
Westmoreland, Jr., W. F	Atlanta	Fulton	1886
Whitley, T. R	Douglasville	Douglas	1882
Word, R. C	Atlanta	Fulton	1855
Word, T. J	Atlanta	Fulton	1887
Yarbrough, W. F	Oxford	Newton	1887

SIXTH DISTRICT.

Alexander, L. B. (V-P.)	Forsyth	Monroe	1877
Anderson, J. F	Cornucopia	Jones	1887
Barron, R. B	Clinton	Jones	1884
Callaway, J. A	Milledgeville	Baldwin	1882
Cotter, R. O	Macon	Bibb	1882
Duggan, J. H	Stephensville	Wilkinson	1884
Hall, Charles H. (C.)	Macon	Bibb	1870
Hall, Kenan	Athens	Clark	1881
Harris, I. L	Milledgeville	Baldwin	1885
Head, J. M	Zebulon	Pike	1883
Heard, J. H	Walden	Bibb	1884
Holt, W. F., (V-P., P.)	Macon	Bibb	1867
Johnson, J. C	Macon	Bibb	1875
Jones, L. M	Milledgeville	Baldwin	1880
Lancaster, J. F	Flovilla	Butts	1884
McDowell, J. M	Barnesville	Pike	1887
McHatton, H	Macon	Bibb	1883
Moore, K. P. (V-P., O., T., P., S.)	Macon	Bibb	1871
O'Daniel, M. H. (O., C.)	Milledgeville	Baldwin	1882
O'Daniel, William (T., P.)	Bullards	Twiggs	1870
O'Daniel, W. A	Bullards	Twiggs	1886
Ponder, W P	Forsyth	Monroe	1885
Powell, T. O. (P.)	Milledgeville	Baldwin	1867
Rosser, W. A	Bolingbroke	Monroe	1884
Whitaker, J. M	Milledgeville	Baldwin	1881
Williams, H. J. (O.)	Macon	Bibb	1883

SEVENTH DISTRICT.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Battey, H. H	Rome	Floyd	1882
Battey, Robert, (C., P.)	Rome	Floyd	1859
Beazley, J. S	Stilesboro	Bartow	1887
Calhoun, F. R. (V-P.)	Euharlee	Bartow	1873
Clements, J. W	Subligna	Chattooga	1877
Dudley, M. J	Sonora	Gordon	1888
England, W. G	Cedartown	Polk	1886
Fink, M	Rome	Floyd	1888
Greene, J. G	Rockmart	Polk	1879
Griffin, C. F	Cassville	Bartow	1888
Holmes, G. W. (V-P., P., C.)	Rome	Floyd	1867
Holmes, J. B. S., (V-P.,)	Rome	Floyd	1872
Holmes, T. M	Rome	Floyd	1883
Hoyt, W. D	Rome	Floyd	1871
Humphries, J. R	Acworth	Cobb	1870
Johnson, Lindsay	Cartersville	Bartow	1888
Matthews, J. C	Rogers	Bartow	1880
Ramsaur, D. H	Rome	Floyd	1889
Richardson, E. H. Jr. (O.,C.,V-P.)	Cedartown	Polk	1878
Shaw, T. M	Coosa	Floyd	1878
West, G. R	Rome	Floyd	1888
Wright, A. W	Cave Spring	Floyd	1879

EIGHTH DISTRICT.

Bell, A. A	Madison	Morgan	1856
Benedict, Samuel C	Athens	Clarke	1883
Brawner, W. M	Lexington	Oglethorpe	1884
Deadwiler, M. P. (V-P.)	Elberton	Elbert	1884
Fortson, T. S	Washington	Wilkes	1886
Gerdine, John (C., V-P.)	Athens	Clarke	1882
Goss, I. H	Fort Lamar	Madison	1877
Hill, J. J	Washington	Wilkes	1889
Mulligan, G. W. (V-P.)	Washington	Wilkes	1882
Pope, J. E	Athens	Clarke	1870
Stovall, A. S. J	Elberton	Elbert	1889
Wade, R. M	Athens	Clarke	1882

NINTH DISTRICT.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Bailey, J. W	Gainesville	Hall	1861
Hardman, L. G	Harmony Grove	Jackson	1877
Pendergrass, J. B	Jefferson	Jackson	1883
Quillian, H. P	Arp	Banks	1888
Sorrels, R. P	Danielsville	Jackson	1887
Watson, W. A	Jefferson	Jackson	1883

TENTH DISTRICT.

Allen, J. E	Augusta	Richmond	1880
Baker, A. H	Augusta	Richmond	1876
Baxley, W. H	Hephzibah	Richmond	1886
Barnett, J. W	Raytown	Taliaferro	1880
Battey, W. W	Augusta	Richmond	1876
Brantley, S. D	Sandersville	Washington	1849
Campbell, H. F. (O., V-P., P.)	Augusta	Richmond	1851
Cunyers, H. D	Bartow	Jefferson	1888
Davidson, A. C	Sharon	Taliaferro	1887
Davis, J. P	Tennille	Washington	1886
Doughty, W. H. (C.)	Augusta	Richmond	1857
Doughty, W. H., Jr	Augusta	Richmond	1880
Dugas, George C	Augusta	Richmond	1880
Flanders, J. W	Wrightsville	Johnson	1884
Ford, DeSaussure (V-P., P.)	Augusta	Richmond	1857
Foster, Eugene (V-P., C., P.)	Augusta	Richmond	1875
Gay, D. E	Sidney	Emanuel	1875
Gercke, R. O	Augusta	Richmond	1876
Goodrich, E. C., (T.)	Augusta	Richmond	1876
Green, J. E	Augusta	Richmond	1886
Hatch, M. G. (C.)	Tennille	Washington	1883
Harison, Jr., W. H	Augusta	Richmond	1886
Henderson, J. R	Sun Hill	Washington	1884
Hickman, C. W	Augusta	Richmond	1880
Hitt, V. G	Augusta	Richmond	1870
Holliday, W. Z	Harlem	Columbia	1884

TENTH DISTRICT.—CONTINUED.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.
Hull, J. M	Augusta	Richmond	1882
Kelly, T. J	Tennille	Washington	1884
Lamb, Theodore	Augusta	Richmond	1886
Lane, E. W	Scarboro	Screven	1885
Mathis, A. A	Sandersville	Washington	1872
McMaster, H. B	Waynesboro	Burke	1888
Morgan, Jas. B	Augusta	Richmond	1886
Roberts, J. B. (V-P.)	Sandersville	Washington	1875
Seago, J. T	Augusta	Richmond	1885
Spier, C. P	Wadley	Jefferson	1886
Steiner, H. H	Augusta	Richmond	1857
Usry, F. M	Dearing	McDuffie	1886
Whitehead, A. G., (V-P., P.)	Waynesboro	Burke	1869
Winkler, Geo. H	Augusta	Richmond	1886
Wilcox, G. A	Augusta	Richmond	1886
Wright, J. D	Louisville	Jefferson	1884
Wright, Thomas R	Augusta	Richmond	1880

NON-RESIDENTS.

Wells, W. B	Chattanooga	Tennessee	1873

HONORARY LIST.

This list is designed for aged, retired or infirm members of the Association, who are entitled to all the privileges of the Association without payment of dues.

The Secretary would be obliged to members to report any names that should go on this list.

Hollingsworth, W. T	Madison	Morgan	1857
Leitner, C. B	Columbus	Muscogee	1852

IN MEMORIAM.

In Memoriam.

☞ SPECIAL REQUEST TO EVERY MEMBER.—The Secretary *earnestly requests each member of the Association* to aid him *in filling* THE BLANKS in the following Roll of Deceased Members *by making the necessary inquiries* in their respective cities and counties, *and writing him at once* on obtaining the desired information.

NAME.	POST-OFFICE.	COUNTY.	ADMITTED.	DIED.
Adams, C. B	Augusta	Richmond	1868	1875
Alexander, J. R		Floyd	1849	
Alfriend, E. W. (V-P.)	Albany	Dougherty	1852	1886
Arnold, R. D. (V.P., P.)	Savannah	Chatham	1849	1876
Avery, J. C	Decatur	DeKalb	1859	1878
Ballinger, M. R	Floyd Springs	Floyd	1860	1886
Banks, J. T. (V-P., P.)	Griffin	Spalding	1858	1880
Barkwell, T. J	Hawkinsville	Pulaski	1859	
Battle, H. L	Russellville	Monroe	1849	
Bell, T. W	Busbyville	Houston	1853	
Bignon, H. A	Augusta	Richmond	1852	1870
Billing, S. A	Columbus	Muscogee	1855	1872
Black, R. C. (T.)	Augusta	Richmond	1852	1860
Bomar, B. F	Atlanta	Fulton	1859	
Borcheim, L. E	Atlanta	Fulton	1886	1887
Boswell, S. J. (V-P.,)	Columbus	Muscogee	1855	
Bothwell, D. J	Vienna	Dooly	1849	
Bozeman, J. F	Atlanta	Fulton	1855	1877
Brandon, D. S	Thomasville	Thomas	1873	1878
Broadhurst, W. W	Augusta	Richmond	1852	1861
Bruce, R. J	Thomasville	Thomas	1874	1880
Bunn, William	Wilna	Houston	1854	
Burgess, Wm. R. (T., O.)	Macon	Bibb	1870	1878
Burney, S. W. (P.)				1876

Campbell, Robert	Augusta	Richmond	1849...1885
Carroll, J. C	Laurens Hill	Laurens	1857...1870
Carroll, R. C	Augusta	Richmond	1873...1882
Castlen, F. G	Macon	Bibb	1867...1874
Carlton, J. M.	Athens	Clarke	1882...1883
Charlton, T. J. (C.)	Savannah	Chatham	1862...1886
Charters, W. M. (P.)	Savannah	Chatham	1851...1883
Chase, D. S	Augusta	Richmond	1852
Clark, S. B	Rich. Factory	Richmond	1852
Coe, J. N	Flat Rock	Pike	1856
Colley, F. S. (P.)	Monroe	Walton	1856
Cooper, G. F. (C., S., V-P.)	Americus	Sumter	1849.. 1882
Copeland, A. B	Hamilton	Harris	1878...1882
Cornwall, G. H	Hillsboro	Jasper	1854
Crawford, S. S	Augusta	Richmond	1857
Crump, E. D	Herndon	Burke	1872...1881
Cumming, H. M	Augusta	Richmond	1862...1887
Cunningham, L. S	Big Creek	Forsyth	1859...1862
Cunningham, W. D	Jasper	Pickens	1859...1866
D'Alvigney, N	Atlanta	Fulton	1877
Davenport, C. W	Point Peter	Oglethorpe	1852
Davenport, H. S	Calhoun	Gordon	1859
Davis, W. L	Albany	Dougherty	1849
Dean, S. H	Conyers	Rockdale	1856
Dearing, W. E	Augusta	Richmond	1852...1867
DeCortez, C. A	Savannah	Chatham	1872
Dickinson, J. T	Albany	Dougherty	1857
Dickinson, R. Q. (V-P., P.)	Albany	Dougherty	1850
Dugas, L. A. (P.)	Augusta	Richmond	1852...1884
Dupree, L. J	Camilla	Mitchell	
Eve, Jos. A	Augusta	Richmond	1852...1886
Eve, S. C	Augusta	Richmond	1868...1884
Felder, W. L	Augusta	Richmond	1857...1867
Fish, J. D. (T.)	Savannah	Chatham	1875...1879
Fitzgerald, E	Macon	Bibb	1882...1885
Ford, L. D	Augusta	Richmond	1849...1884
Fort, Moses T	Hawkinsville	Pulaski	1859...1878

Franklin, M. A	Macon	Bibb	1849...1858
Frazier, W. M	Hawkinsville	Pulaski	1850
Gaither, B. T	Oxford	Newton	1852...1853
Gardner, J. W	Augusta	Richmond	1857
Girardey, Edward	Augusta	Richmond	1852...1859
Gordon, J. M	Savannah	Chatham	1849
Gray, James A. (s.)	Atlanta	Fulton	1882...1887
Gray, S. H	Barnesville	Pike	1871...1885
Green, A. B	Pond Town	Sumter	1849
Green, H. K	Macon	Bibb	1849...1867
Green, Thomas F	Milledgeville	Baldwin	1849...1879
Gregory, J. D		Sumter	1849
Grimes, T. W	Columbus	Muscogee	1855...1882
Habersham, J. C	Savannah	Chatham	1853
Habersham, J. C., Jr. (v-p.)	Savannah	Chatham	1866...1881
Habersham, S. E.	Eatonton	Putnam	1870
Hammond, D. W. (v-p.)	Macon	Bibb	1857...1887
Harden, W. P	Harmony Grove	Jackson	1853...1885
Harrell, W. J	Bainbridge	Decatur	1874...1881
Harris, S. N. (v-p.)	Savannah	Chatham	1851...1854
Harrison, Gabriel	Macon	Bibb	1862
Harriss, Juriah (o., v-p.)	Savannah	Chatham	1852...1876
Hart, A. C	Waynesboro	Burke	1852
Hawes, E. C	Appling	Columbia	1852
Heard, T. O	Griffin	Spalding	1867
Hendrick, J. B	Covington	Newton	1857...1881
Henry, G. C	West Point	Troup	1872
Hook, E. B	Augusta	Richmond	1857...1862
Hoxey, Thomas	Columbus	Muscogee	1849...1853
Hunter, E. H. W	Louisville	Jefferson	1857...1883
Ingraham, E. P	Albany	Dougherty	1870...1873
Irvine, Robert	Augusta	Richmond	1880...1881
Johnson, C. W	Macon	Bibb	1870...1875
Johnson, John M	Atlanta	Fulton	1866...1886
Jones, B. O	Atlanta	Fulton	
Jones, J. W	Atlanta	Fulton	1857...1871
Kennebrew, Henry	Athens	Clarke	1883...1886

Kirkscey, E. J. (V-P.)	Columbus	Muscogee	1871...1877
Kollock, P. M. (P.)	Savannah	Chatham	1852...1872
Lamar, T. R. (V-P.)	Macon	Bibb	1849...1859
Lightfoot, W. S	Macon	Bibb	1849...1864
Lackhart, R. H	Columbus	Muscogee	1855...1859
Long, Crawford W	Athens	Clarke	1849...1878
Lumpkin, George	Maxey's Depot	Oglethorpe	1859
Lumpkin, S. P	Watkinsville	Clarke	1859
Mackie, J. D	Augusta	Richmond	1852...1854
Maffit, R. G. W	Dalton	Whitfield	1859
Mathews, W. D	Fort Valley	Houston	1884...1885
McBride, W. G	Oconee	Washington	1850...1873
McGoldrick, R	Macon	Bibb	1849...1853
McKinley, C. A	Newnan	Coweta	1859
McMillan, J. E	Columbus	Muscogee	1872...1883
Means, A. (V-P.)	Oxford	Newton	1851...1883
Means, O. S	Oxford	Newton	1857
Meiere, William S	Madison	Morgan	1857
Milam, R. J	Fairburn	Campbell	1882...1882
Morrison, D. H	Savannah	Chatham	1868...1869
Musgrove, W. C. (C.-S)	Midville	Burke	1849...1876
Nash, R. A	Marion	Twiggs	1849
Nisbet, R. H	Eatonton	Putnam	1854...1873
Nottingham, C. B. (S.,T.,C.,P.)	Macon	Bibb	1849...1875
Nunn, R. M	Savannah	Chatham	1871...1873
Ogilby, H. J. (V-P.)	Madison	Morgan	1849...1873
O'Keefe, D. C. (S.)	Atlanta	Fulton	1852...1871
Orme, L. H. (S.)	Atlanta	Fulton	1866...1872
O'Sullivan, ———	Cork	Lee	1849
Owen, J. D		Baldwin	1850
Parsons, J. M	Russellville	Monroe	1845
Pitts, G. W	Star	Butts	1859
Posey, J. F	Savannah	Chatham	1851
Pringle, W	Covington	Newton	
Ragan, Isham H	Palmyra	Lee	1856
Raines, Thomas	Atlanta	Fulton	1872...1883
Raines, T. L	Atlanta	Fulton	1882...1884

Rauschenberg, Christian	Atlanta	Fulton	1861...1878
Richardson, C. P.	Savannah	Chatham	1851...1853
Ridley, R. A. T., (V-P.)	LaGrange	Troup	1859...1871
Robertson, J. J	Washington	Wilkes	1852...1872
Roddy, R. L. (V-P.)	Forsyth	Monroe	1849...1878
Ruffin, W. R.	Augusta	Richmond,	1852
Russell, W. J.	Lawrenceville	Gwinnett	1861
Ryan, T. D. L.	Hawkinsville	Pulaski	1859...1876
Stafford, S. J.	Madison	Morgan	1856...1859
Searcy, D. B.	Bolingbroke	Monroe	1849...1885
Shropshire, J. W.			1871
Simmons, J. N.	Atlanta	Fulton	1850...1871
Simmons, J. S.	Gainesville	Hall	1873...1881
Simmons, S. B.	Augusta	Richmond	1852...1867
Simmons, T. A.	Irwinton	Wilkinson	1871...1872
Smith, A. D.	Montezuma	Macon	1871
Smith, C. W.	Jonesboro	Clayton	1859
Smith, Hiram	Augusta	Richmond	1876...1888
Smith, H. H.	Augusta	Richmond	1886...1887
Smith, R. M. (C.)	Athens	Clarke	1879
Smith, Thomas	Savannah	Chatham	1858...1876
Spier, W. A.	Grantville	Coweta	1859
Stallings, J. D.	Preston	Webster	1871
Stanford, F. A.	Columbus	Muscogee	1849...1885
Starr, E. P.	Savannah	Chatham	1868...1873
Steele, H.	Knoxville	Crawford	1849
Steele, R. T.	Fairburn	Campbell	1849
Stephens, W. B.	Forsyth	Monroe	1849
Stewardson, Thomas	Savannah	Chatham	1849
Stozier, L. L.	Albany	Dougherty	1867
Sutton, C. B.		Lee	1856
Taliaferro, V. H. (V-P.)	Atlanta	Fulton	1857...1887
Taylor, E. T.	Columbus	Muscogee	1855
Taylor, R. N.	Hawkinsville	Pulaski	1850
Thomas, J. G. (V-P., C., T.)	Savannah	Chatham	1867...1885
Thompson, Charles	Macon	Bibb	1849...1854
Trammell, A. A.	Forsyth	Monroe	1856

Underwood, J. B.	Cave Spring.	Floyd	1860...1881
Van Meter, J. N.	Euharlee	Bartow	1879...1881
Wall, W. W.	Calhoun	Gordon	1860
Walker, T. F.	Cochran	Pulaski	1859...1888
Ware, A. E. O.			1859
Wells, C. H.	Savannah	Chatham	1853...1854
West, Charles (P.)	Perry	Houston	1849
West, C. W.	Savannah	Chatham	1853...1859
White, S. G. (V-P.)	Milledgeville	Baldwin	1868...1877
Whitlock, Isaac W.	Washington	Wilkes	1852...1853
Wile, Henry	Atlanta	Fulton	1886...1887
Wiley, J. B.	Macon	Bibb.	1849
Williams, T. L.		Dooly	1849
Williams, W. L	Fayetteville	Fayette	1878
Willingham, Willis	Lexington	Oglethorpe	1849...1872
Winn, G. A.	Bolingbroke	Monroe	1849...1862
Wirsen, G. F.	Rutledge.	Morgan	1871...1884
Woodson, C. T.	Wilna	Houston	1854
Wooten, W. H.	Lexington	Oglethorpe	1852...1860
Wragg, J. A.	Savannah	Chatham.	1853
Wright, P. H.	Macon	Bibb.	1869...1888
Yonge, Easton.	Savannah	Chatham.	1880

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